DOCUMENT RESUME

ED 025 606 08 VT 006 015

By- Gurin, Patricia
Evaluation of a Series of Conferences to Disseminate Research Results on Vocational Choice. Final Report.
Michigan Univ., Ann Arbor. Inst. for Social Research.
Spons Agency- Office of Education (DHEW), Washington, D.C.
Bureau No- BR 5-1158
Pub Date May 68
Contract- OEC-6-85-085
Note- 62p.
EDRS Price MF-$0.50 HC-$3.20
Descriptors- Comparative Analysis, *Conferences, Evaluation Criteria, Information Dissemination, Information Utilization, Institutional Research, Interaction, *Negro Colleges, Occupational Aspiration, *Occupational Choice, Participant Satisfaction, Program Effectiveness, *Program Evaluation, Questionnaires, *Research Utilization, Student Motivation
Identifiers- Feedback Conferences

This report presents the results of a dissemination project, the objectives of which were: (1) to conduct a set of conferences at several predominantly Negro colleges for the reporting of research results from a study in which these schools had previously participated, (2) to evaluate the effectiveness of these conferences with respect to obtaining full discussion of study results and producing institutional change, and (3) to relate effectiveness of the feedback process to internal characteristics and resources of the institutions, and the nature of external inputs, particularly financial inputs from governmental sources and private foundations. One year following the last feedback conference, the concept of utilization includes requests for further discussion of the study results, further data analysis, research collaboration, and development of new programs. (CH)

BR-5-1158
PA-08

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ED025606

VT006015

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

ED025606

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OFFICE OF EDUCATION

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EVALUATION OF A SERIES OF CONFERENCES TO DISSEMINATE RESEARCH RESULTS ON VOCATIONAL CHOICE

Patricia Gurin

Survey Research Center
Institute for Social Research
University of Michigan
Ann Arbor, Michigan

May 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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TABLE OF CONTENTS

Page

LIST OF TABLES iv

SUMMARY 1

Method 1

Selection of Schools 1
Prior Relationship to the Schools 1
Design of the Conference 2
Data and Criteria for Evaluating Effectiveness of the Conferences 2
Possible Explanatory Factors 3

Results 3

Responsiveness of the Institutions to the Initial Proposal for the Conferences 3
Evaluation of the Conferences by Participants 5
Utilization of Research Results in the Year Following the Conferences 6

I. INTRODUCTION 8

The Problem 8

Conception of Effective Dissemination 9

Specific Objectives 10

Relevance to Vocational-Technical Education 10

Related Research 10

II. METHOD 12

Design of the Conferences 12

Possible Explanatory Factors 12

Types of Institutions Included in the Original Study 12

Selection of Schools for the Feedback Conferences 13

Criteria for Evaluating Effectiveness of the Conferences 13

A Word of Caution 14

Page

III. RESULTS 16

Institutional Responsiveness to the Initial Proposal for the Feedback Conferences 16

Responsiveness to the Initial Letter 16
Involvement of Institutional Representatives in Planning the Conferences 17
Involvement of Participants Across the Organizational Hierarchy 21
Summary of Responsiveness to the Proposal for Feedback Conferences 24

Evaluation of the Conferences by Participants 25

Description of the Conferences 25
Evaluation 26
Summary of Evaluations of the Conferences 29

Utilization of the Research Results in the Year Following the Conferences 34

Meaning of Utilization 34
Evaluation 35

IV. DISCUSSION AND IMPLICATIONS 42

The Issue of Credibility and Trust 42
Importance of Interactional Factors 43
Importance of the Conference Discussion Groups Themselves 46
Importance of Internal Characteristics of the Institution 46
Importance of External Resources 48
Models of Institutional Change 49

REFERENCES 52

APPENDIX: Reaction Form

LIST OF TABLES

Table / Page

1 Level of Responsiveness of the Eight Schools 25

2 Relationship Between Responsiveness of the Institutions and Nature of the Conferences 27

3 Institutional Differences in Reactions to the Conferences 30

4 Relationship Between Prior Institutional Responsiveness and Reactions to the Conferences 31-32

5 Relationship Between Type of Conference Session and Participant Reactions to the Conferences 32-33

6 Institutional Differences in Follow-Up Requests During the Year Following the Conferences 38

7 Relationship Between Institutional Responsiveness to the Conference Project and Subsequent Follow-Up Requests During the Year Following the Conferences 39

Summary

This report presents the results of a dissemination project, the objectives of which were:

- to conduct a set of conferences at several predominantly Negro colleges to report research results from a study in which these schools had previously participated,
- to evaluate the effectiveness of these conferences with respect to two criteria - obtaining full discussion of study results and producing institutional change,
- to relate effectiveness of the feedback process to: (a) internal characteristics and resources of the institutions themselves, (b) nature of the research team's interactions with the institutions, and (c) nature of external inputs, particularly financial inputs from governmental sources and private foundations.

Method

Selection of Schools

The conferences were held at eight predominantly Negro colleges in the Deep South. All of these institutions had previously participated in a study of their students' motivations and aspirations, particularly their vocational aspirations. Five of the institutions are private and three public. At four of them more than 50 percent, and at two more between 40 and 50 percent, of the students were enrolled in nonliberal arts majors. Only two are exclusively liberal arts colleges. The schools also differ in their academic status, as judged by the accrediting association in the region. Some are considered by the association to be in its highest academic grouping while others are judged as having somewhat lower status, although still meeting basic accreditation requirements. Although these institutions are not randomly selected from all predominantly Negro colleges, their variation on these dimensions does provide a fairly representative group of schools.

Prior Relationship to the Schools

To facilitate the research process, the president of each of these institutions had appointed a liaison person to work with the research staff throughout the course of the study. In some institutions this liaison person was an academic dean, in others the Dean of Students, and in a few others a member of the social science faculty. Although the actual involvement between these liaison people and the research staff varied considerably from institution to institution, we approached the dissemination project with at least some kind of working relationship at each institution. Since the design of the prior research project included administering questionnaires to the total student body at the beginning of the academic year, as well as administering a follow-up questionnaire to the freshmen at the end of the year, there had been considerable interaction with these liaison persons simply around administrative procedures. Furthermore, at some schools our contacts had been much broader and extended much beyond administrative concerns. Still, it should be kept in mind that the previous study had not been solicited by the participating institutions. Instead, their cooperation had been requested by the Institute for Social Research in a letter to the president of each institution. This meant we also approached the dissemination process knowing that institutional interest in the study results was bound to be less than it would have been had the study been solicited by the institutions themselves.

Design of the Conferences

The general plan to be followed at the conferences was developed out of the work of Mann and others on utilization of research knowledge. Mann calls attention to five factors which make for the efficacy of systematic feedback of survey findings within an institutional framework. (1) Participation in the interpretation and analysis of research results leads to the internalization of information and beliefs; (2) feedback of information and its discussion by appropriate groups makes it highly relevant to the functioning of the group; (3) knowledge of results can itself motivate people toward institutional change; (4) group support is especially effective for sustaining changes; and (4) the feedback method which is sponsored by various parts of the institutional structure legitimizes the change process.

Because of the importance of these kinds of factors in other dissemination projects, we attenpted to do the following at each of the institutions: (1) Involve institutional representatives as fully as possible in planning the conferences, (2) involve a wide cross-section of the members of the institution so that conference participants would come from many levels of the organizational hierarchy, (3) make the material to be presented in the feedback sessions as personally relevant to the participants as possible, (4) explicitly include plans for follow-up and further action possibilities as part of the conference discussions. How closely the actual conferences approximated this design is one of the ways in which our effectiveness varied in the different institutions. This leads us to the criteria for evaluating effectiveness.

Data and Criteria for Evaluating Effectiveness of the Conferences

The conferences were to be considered effective if they provided for full discussion of research results and if they encouraged some changes within the institutions. Since these are very broad goals, the actual criteria for measuring effectiveness were further specified as follows:

1. Level of responsiveness to our initial proposal for the conferences

   - timing and enthusiasm of response to the initial letter about the conference project

   - level of involvement of institutional representatives in planning the conferences

   - degree to which a wide cross-section of organizational members were actually included in the conferences

2. Reactions and evaluations of the conferences by institutional members who participated

   Each participant was asked to fill out a Reaction Form which included reactions to the results, evaluation of the way the results were presented, suggestions of action implications following from the results, and questions about the participant's position and function within the institution. These Reaction Forms provide data for examining differences among the institutions in evaluating the conferences at the time they were held.

3. Utilization of the research results in the year following the feedback conferences

   - requests for further discussion of study results
   - requests for further data analysis to follow up ideas coming out of the conferences
   - requests for research collaboration involving collection of additional data beyond that provided by the earlier study
   - development of new programs, changes in institutional structure, or other evidences of actual changes within the institution

Possible Explanatory Factors

As specified under the objectives, the factors which might explain variation in how effective the conferences were in the different institutions fall into three classes of variables: (1) internal institutional characteristics or resources, (2) nature of the research team's interactions with the institutions during the research process itself, and (3) nature of the institutions' relationships with other external agencies such as government, accrediting associations, other educational institutions, and private foundations.

Results

Responsiveness of the Institutions to the Initial Proposal for the Conferences

Three indicators of institutional responsiveness to the conference proposal were examined: responsiveness to the initial letter about the conferences, responsiveness to involving representatives in planning the conferences, and responsiveness to cross-hierarchical participation in the conferences. By combining these three indicators, the institutions can be ranked as follows:

High Responsiveness

High responsiveness to initial letter Collaboration in planning conferences Wide involvement of organizational members in conferences	One school

Moderately High Responsiveness

Moderate responsiveness to initial letter Collaboration in planning conferences Wide involvement of organizational members in conferences	Two schools

Moderate Responsiveness

1. Moderate responsiveness to initial letter No collaboration in planning conferences Wide involvement of organizational members	Two schools

2. High responsiveness to initial letter
   Collaboration in planning conferences — One school
   Restricted involvement of organizational members in conferences

Low Responsiveness

Low responsiveness to initial letter
No collaboration in planning conferences — Two schools
Restricted involvement of organizational members in conferences

The factor which stands out in explaining reactions to our initial proposal is the way the proposal was made. Several of the presidents said they would want a written report of the study before their institutions proceeded further with the idea of carrying on discussions about study results in group meetings on the campus. Our original plan had been to run the conferences before the final report of the study was completed, since we hoped these discussions would be helpful in interpreting the study results. This plan was changed because of the presidents' reactions. Then, five months later, at the beginning of the next academic year, the final reports and an appendix, with tables prepared for each school to show comparisons that were relevant for that particular school, were sent to the presidents of each of the institutions. Since all but one of these schools responded enthusiastically at this point, it was clearly important for the presidents and other people at the colleges to have a chance to look at the written reports. Our original plan simply had been quite unrealistic, given the asymmetrical nature of our relationship to the institutions. Had the original study been solicited by these institutions, they might well have reacted quite differently, viewing the reporting of results as a service to them. Given that they were simply cooperating with another organization's research plan, they were understandably reserving their reactions and commitments to an on-going relationship with us until they were able to look at the way the study results were presented to the public.

Two factors seem to be particularly important in explaining which institutions collaborated most in planning the conferences. The more important concerns the research staff's previous relationships on these campuses. The four schools where collaborative planning occurred were also the four where our relationships had been particularly broad and where the contact with the liaison person extended beyond the strictly administrative demands of the research project. That these four schools were eager to advise and work with us in setting up the feedback conferences is not surprising in light of the previous interactions. This highlights how crucial it is for research organizations to consider these relationship factors throughout the course of the research process if they are concerned about research utilization. A second factor which seems to have something to do with institutional involvement in conference planning is the institution's command over external resources. The schools with the largest government and foundation grants also tend to be those where active collaboration in planning the conferences occurred most readily. The four schools where collaborative planning did take place also have significantly greater financial support from outside sources; furthermore, this is not explainable in terms of private or public sponsorship. The schools with the larger grants undoubtedly have greater experience dealing with outside agencies which, in turn, may encourage cooperative and collaborative arrangements even with agencies that do not offer financial assistance. Furthermore, the greater financial resources of these schools may enhance desirability of the research input. Discussing the implications of research is likely to be much more desirable when money is currently available or when there is a belief that outside funds are obtainable to do something about the ideas generated by such discussions.

Two factors also stand out in accounting for which institutions responded positively to including a wide cross-section of institutional members in conference discussions. One of these is the nature of the school's authority structure. Two of the three schools where participation was restricted primarily to top administrators are schools that might be described as having relatively "vertical structures"; they are institutions in which the boundaries between hierarchical levels are fairly rigid. Typically the faculties have little authority, little involvement in decision making, and little access to top administrative decision-making bodies. Moreover, the students in these schools have practically no experience participating on committees with administrators or faculty. Therefore, it is not surprising that these two schools responded to the conferences much as they would to any other administrative process, restricting participation to the usual administrative officers concerned about the administrative affairs of the institution. The description of these two schools' authority structures comes not only from our own observations; our observations are also validated by data from students on these campuses and from answers given by the administrators themselves to the question in the conference Reaction Form about decision-making groups in their institutions. A different factor seems to be important at a third school where participation was also highly restricted. This is a school where only four top-level administrators met to discuss the study results. Furthermore, on every measure of responsiveness, this school is the least responsive. Most striking in accounting for why we were so ineffective at this school is the nature of our previous relationships in that school. Our contacts with the academic dean and other people whom we met in official capacities were congenial and friendly but restricted exclusively to getting the job done. This seemed to have more to do with our own approaches and actions than it did with administrative caution in handling outsiders. Even though it may be difficult to analyze why the relationships developed as they did on this campus, it is clear that relationship factors were the critical ones in accounting for this institution's lack of interest and involvement in the dissemination project.

Evaluation of the Conferences by Participants

Another set of results has to do with the way participants at the conferences evaluated the conference procedings. They were asked to fill out a Reaction Form which asked questions about: (1) clarity of the presentation, (2) validity of the results, (3) usefulness and action-relevance of the results, and (4) desires for follow-up and continuing discussion of the results.

Institutional differences can be seen in all but one of these judgments. Many of these differences are understandable in terms of how responsive the institutions had already been at the time the conferences were held to the research project and to the idea of holding the conferences. It is particularly in the most responsive schools that the conferences were evaluated most positively. In the most responsive schools the participants were less likely to question the validity of the results; they were more likely to report seeing something in the results that could be helpful in their own work and to conclude that the meetings did produce useful knowledge; finally, they more frequently expressed a desire for follow up after the conferences, to have more meetings like the conference sessions, to explore the results in greater detail, and specifically, to discuss the study results with students at the institution.

Moreover, it is not only in differentiating the participants' reactions that the issue of institutional responsiveness is seen as important. It also affected the kind of conferences that were held. It was in the most responsive schools that it was possible to conduct meetings in small enough groups and composed in such a way that thorough discussion of the school's results was really possible. In the least responsive schools, the feedback occurred at a single meeting, a general session attended by all participants at those schools, where both the size and the fact that the participants represented diverse institutional interests minimized thoroughness and depth of discussion. In the more responsive schools, the conferences included discussions with much smaller groups representing functional units of people with common interests. Examples of these functional units are (1) faculty of the various academic divisions within the school, (2) student groups assembled by class level, by dormitory residence, or by extracurricular activity groups, (3) staff and student personnel services, and (4) dean's councils, etc.

It is also true, however, that what kind of conference was held played a part, independently of responsiveness of the institution, in differentiating the reactions of participants. This can be seen through differences in the reactions of people who attended three different types of conferences held at three schools which were equated for level of responsiveness. Where the conference included discussion in small, functional units, the evaluations were more positive than they were where the conference was organized solely around a general session. Participants who experienced the smaller, functional discussion groups reported greater understanding of the study results; their judgments of validity of the results were enhanced; they considered within-school comparisons more valuable than data describing differences between the participating schools; they felt the results were somewhat more useful; finally, participants in the small groups expressed greater desire for continued follow-up and discussion of the results.

Utilization of Research Results in the Year Following the Conferences

The original research proposal specified checking a year after the last feedback conference was held to see in what ways the research results had been utilized in these institutions during that year. In this report the concept of utilization includes the following: (1) requests for further discussion of the study results, (2) requests for further data analysis to follow up ideas coming out of the conferences, (3) requests for research collaboration involving the collection of additional data beyond that provided by the earlier study, and (4) development of new programs, changes in institutional structure, or other evidences of actual changes within the institution.

Looking at the first three of these, the results show considerable institutional variation in the effects of the conferences. At two schools all three types of requests for follow up were made; at one other there was a request for both further data analysis and new research collaboration; at two others only one of these types of requests was made; finally, at three of the schools there were no follow up resuests in the year following the conferences.

Except for these kinds of requests, it is very difficult to pinpoint a real connection between the research or the feedback conferences and subsequent institutional changes or development. Still, several of the liaison persons did express a personal judgment that the dissemination process had been a helpful, even if not a critical factor, in new developments or changes. For instance, at one school, one of the two from which all three types of follow-up requests also came, the liaison person reported that changes in the counseling system were brought about, at least partly, by the study results.

These institutional differences in the extent to which the research was utilized in the year following the conferences reflect, in large measure, how responsive the institutions had already been at the time the conferences were held. The two schools which requested all three types of follow-up had been highly responsive all along. In contrast, the three schools which made no requests, indeed with whom there has been no contact except the visit with the liaison person specified by the conference project proposal, were all schools which had been relatively unresponsive prior to the conferences. The other schools, those making at least some requests, fell somewhate in the middle with respect to their earlier level of responsiveness as well.

To point out that these differences reflect institutional responsiveness to the study and to the feedback does not completely explain why certain schools have used the study more than others. At least, it is possible to take a step back to see which of the possible explanatory factors which were related to institutional responsiveness also seemed to differentiate which schools have made the greatest use of the study results. Very few of the internal characteristics of the institutions which were examined turn out to be important. Instead, it is the more exogenous factors, particularly external resources of a financial sort and the research organization's prior relationship to the schools, which seem to differentiate which institutions have used the research since the conferences. Requests for follow-up discussions, further data analyses, and new research developments have occurred most frequently in schools where our relationships had been especially good during the research process and where there had been greater success in obtaining outside funds from governmental and private foundation sources.

I. Introduction

The Problem

As social scientists have become more and more involved in basic research studies of problems and issues with social and educational significance, we have also become increasingly concerned about the limited usefulness of our research in bringing about meaningful changes in organizations and social settings we study. Even when the research topic is defined in collaboration with social or educational practitioners and the research results do bear on problems of acute interest to practitioners, the impact of our joint endeavors often leaves a lot to be desired.

Though many factors may account for limited utilization of research findings by social and educational agencies, a crucial aspect of the problem seems to be the feedback process itself - the way in which research results are reported back to members of the participating organizations. Floyd Mann of the Survey Research Center has repeatedly found, in controlled experiments in a variety of organizations, that basic research can be effectively utilized and produce meaningful changes in organizational procedures when research results are disseminated under proper conditions. These proper conditions include face-to-face interaction rather than dependence upon written reports and the involvement of personnel across the organizational hierarchy. Admittedly, it is very easy for research personnel to define the completion of their task as the published report no matter how much effort was involved earlier in making the study relevant to actual problems in the field. Similarly, practitioners who participate most closely in the research process can easily define the research report as the end stage of collaboration because they may have gained useful information themselves and have a personal sense of the venture's worth. But, if practitioners want policy decisions to be guided by systematic research, and research personnel want their work effectively applied in social settings, we must pay greater heed to this information feedback process.

This general problem defined the general objective of this project - to conduct and evaluate a series of conferences in ten predominantly Negro colleges which would hopefully secure effective dissemination of research results previously obtained in each of the schools.[1] The research results which were to be discussed in the conferences centered on determinants of the students' career choices.

For a number of reasons these research results seemed potentially quite useful to the participating schools. In the first place, these institutions want a better picture of their students' needs and interests in the vocational domain as they face the challenge of training students for skill and job areas heretofore largely closed to Negro youth. Secondly, these institutions are under attack from many directions. Even when the attacks are well-intentioned, they are often bewildering and threatening rather than constructive in effect. Although research data can buttress a defensive nonchange position, they can also be used to focus on the nature of an institution's problems and on positive factors already operating in the institutional environment which could be strengthened as the institution develops and changes. Thirdly, it was during the period in which the research was conducted that the Higher Education Act of 1965, with its resources under Title III for Strengthening Developing Institutions, was passed, significantly increasing the possibility of institutional change by providing support and resources which were previously hard to come by for most of these institutions. Given that these internal and external forces were already operating to promote change, the possibility that the research results might also be utilized for change seemed considerably heightened, assuming we were sufficiently concerned about the dissemination process. Of course, this raises the issue of what effective dissemination of research results is.

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[1] The original study which provided the research results discussed in the feedback conferences was sponsored by the Office of Education, Project No. 5-0787, Contract No. OE-4-10-095. It is reported in a monograph by Gurin, P. and Katz, D., Motivation and Aspiration in the Negro College, Institute for Social Research, Ann Arbor, Michigan, 1966.

Conception of Effective Dissemination

The dissemination process can be considered effective if it:

Provides for meaningful presentation and interpretation of the data so that the participants become engaged in full discussion of research results, and

results in some institutional changes that follow from needs highlighted by the discussion of study results.

Accomplishing both of these goals - full discussion of research results and encouragement of institutional change - depends very much on the nature of the original agreement between the institution and the research organization. They are more difficult to accomplish when the study is not solicited by the institution. When an institution contracts with a research organization to do a study for the institution, the procedures for accomplishing these goals may be somewhat different and easier to carry out.

The experience described in this report is relevant to the situation in which the original institution cooperates but does not solicit the study. In this case the original study was initiated by the Institute for Social Research of the University of Michigan. Cooperation of the participating institutions was requested in a letter to the president of each institution describing the purposes of the study and promising a report of study results to each institution. In order to maximize the relevance of the study to each school, it was also suggested that a staff person at the institution be appointed to work with our staff as the study proceeded. This was done at each school. Although the liaison persons had been helpful and institutional cooperation during the data collection phase of the study had been unusually good, we approached the dissemination process with awareness that institutional interest in the study results was bound to be less than it would have been had the study been solicited by the institutions themselves.

The nature of the original agreement or contract with the schools should be kept in mind as we evaluate our experiences in disseminating the results of this study to the participating institutions.

Specific Objectives

1. To plan and conduct a set of feedback conferences at schools which participated in the earlier research project.
2. To evaluate the effectiveness of these conferences with respect to both criteria of effective dissemination set forth above - obtaining full discussion of study results and producing institutional change.
3. To relate effectiveness of the feedback process to: (a) internal characteristics and resources of the institutions themselves, (b) nature of the research team's interactions with the institutions, and (c) nature of external inputs, particularly governmental resources, operating within the institutions.

Relevance to Vocational-Technical Education

Although all of the schools involved in this project are institutions of higher education, most of them have also traditionally trained large numbers of students for vocational jobs not normally requiring a college degree. Only two of them are exclusively liberal arts colleges. In the conferences that were conducted at the colleges, special emphasis was placed on career choices of vocational teaching or vocational skill jobs. Thus, in addition to the general relevance the project has for utilization of research results in educational settings, it has particular concern with results that bear on the vocational-technical area.

Related Research

The need for involving people in a feedback process in the context of the on-going group or organization in which they have membership has been the major point of departure of theorizing and research of Floyd Mann (1957) in the utilization of research knowledge. Mann calls attention to five factors which make for the efficacy of systematic feedback of survey findings within an institutional framework. (1) Participation in the interpretation and analysis of research results leads to the internalization of information and beliefs; (2) Feedback of information and its discussion by appropriate groups makes it highly relevant to the functioning of the group and its members. Principles at a general level of abstraction are not as easy to apply as the discovery of ideas based upon immediate experience; (3) Knowledge of results can itself motivate people toward improving their performance; (4) Group support is especially effective for sustaining changes when there is a continuing group in operation; (5) The feedback method which is sponsored by various parts of the institutional structure legitimizes the change process.

In a large public utility Mann measured the effectiveness of the feedback of research information to organizational families by comparing two control departments receiving feedback. Eighteen months after the start of the feedback, the experimental departments showed marked improvement over their previous position in terms of job interest, job responsibility, relations with supervisor and satisfaction with their progress in the company. The control department showed no comparable changes.

The Mann approach of utilizing research findings as feedback to institute a change process is similar to the group therapy approach of the Tavistock

Institute (Jacques, 1952) and the Bethel leadership training laboratory but there are critical differences (Lippitt, _et al_, 1958). The Mann approach starts with detailed data about the group itself and so can approach problems from the objective point of view of scientific fact finding. It does not attempt to go deep into therapy problems. It is concerned with making the institutional changes necessary for progress, not with restructuring the internal lives of the maladjusted. Our evaluation of the feedback process, then, refers to the efficacy of the changes produced in the institution in the Mann tradition.

II. Method

Design of the Conferences

The project plan called for feedback conferences to be held at eight institutions. Following from the work of Mann and associates, there were certain elements which were to be included in the conferences at all the schools:

1. As full involvement as possible of institutional representatives in planning the conferences.

2. Involvement of a wide cross-section of the members of the institution with the participants cutting across the organizational hierarchy.

3. Inclusion of material as personally relevant to participants as possible.

4. Inclusion of follow-up plans and further action possibilities as part of the conference discussions.

These, then, were to be the common ingredients of all the conferences, assuming that the institutions would agree to these procedures. Thus, in the original plan it would have to be something other than the conference procedures themselves which would account for how effective the conferences would prove to be.

Possible Explanatory Factors

Factors which would vary across the institutions and, therefore, potentially might be helpful in interpreting the usefulness of the conferences fall into three classes of variables: (1) internal institutional characteristics or resources, (2) nature of the research team's interactions with the institutions during the research process itself, and (3) nature of the institutions' relationships with other external agencies such as government, accrediting associations, other educational institutions, foundations, etc.

Types of Institutions Included in the Original Study

Variation with respect to the first of these factors, internal institutional characteristics, was provided by the way the schools which had participated in the original research study had been selected. Since a major objective of the original research was to examine different modes of institutional patterning of aspiration, the schools were chosen to provide a wide diversity of predominantly Negro colleges.

Three dimensions were used to select schools: public v. private sponsorship, academic status of the school and amount of constraint that had been exercised by the school administration over participation in civil rights activities. Academic status was judged by an accrediting association. Two groups of schools were included: those considered by the association to be in its highest academic grouping and those with at least somewhat lower status, although still meeting basic accreditation requirements. Judgment of administrative constraint over civil rights participation was based on public evidence such as the firing of faculty, expulsion of students or administrative directives given publicly to students or faculty. It was not only because of the broader social significance of civil rights activities that this dimension was considered important; it was also used because we felt institutional responses to demonstrations could be used as behavioral indicators of differences in the way administrative authority is exercised in the institutions. Other indicators, such as amount of student and/or faculty involvement in institutional policy committees, could have been used instead to tell us something about the institution's authority structure.

By selecting four public and four private schools which were also judged to be high or low on these other two dimensions, eight types of institutions would result. Actually, ten schools which met the criteria for selection were asked to participate to cover the possibility that certain of these types of schools might refuse to participate or withdraw from the study. All ten schools agreed to participate and cooperated in all aspects of the study.

That this purposive selection of institutions did result in quite different schools can be seen from the results of the original study. They differ markedly in their students' aspirations and on a number of other characteristics as well. Discussion of these institutional differences and how they relate to aspiration levels in the schools is given in detail in the report of the original study (Gurin and Katz, see especially Chapter IX).

Selection of Schools for the Feedback Conferences

Four of the ten schools were institutions where we felt it might be difficult to gain participation of a wide cross-section of people in the institution for the conference. These were four institutions where student and even faculty involvement at the level of policy discussion was uncommon. In addition to our own observations, this was supported by data from the earlier study in which students were asked for their perceptions of the way regulations were made or changed within the institution. Thus, we were worried that one of the elements of the conferences which was to be common at all schools might vary from the outset if all four of these schools were included. Therefore, we selected two of these and the remaining six where we anticipated less difficulty around this issue.

The eight institutions where the conferences were to be held included five private and three public schools. At four of them more than 50 percent, and at two more between 40 and 50 percent, of the students were enrolled in nonliberal arts majors. Only two were almost exclusively liberal arts colleges.

At each of these institutions a standard letter was sent to the president with a copy to the person in the institution who had acted previously at the liaison to the study. It also included a list of topics that could be discussed in the conferences. This list covered both a standard set of topics that we thought would be relevant at all schools and a special set of topics for each school that were suggested because of our knowledge of the special interests at different schools.

Criteria for Evaluating Effectiveness of the Conferences

The feedback conferences were to be considered effective if they provided for full discussion of research results and if they encouraged some changes within the institutions. Since these are very broad goals, the actual criteria for measuring variations in effectiveness were further specified as follows:

1. Level of responsiveness to the initial proposal of the conferences sent as a standard letter to all institutions

    - timing and enthusiasm of response to the initial letter (for instance, did the president respond quickly or much later? Did the response indicate that any steps were being taken to implement the idea or did it only express interest? Was the letter cast in terms of active participation or merely in terms of "letting the research staff do what it wanted"?)

    - level of involvement of institutional representatives in planning the conferences

    - degree to which a wide cross-section of organizational members were included in the conferences

2. Reactions and evaluations by participants of the conferences themselves

    Each participant was asked to fill out a Reaction Form (see Appendix) which included reactions to the results, evaluation of the presentation of results, suggestions of action implications following from the results and questions about the participant's position and function within the institution. These Reaction Forms make it possible to examine differences among the institutions in evaluating the conferences at the time they were held.

3. Utilization of the research results in the year following the feecback conferences

    - requests for further discussion of study results

    - requests for further data analysis to follow up ideas coming out of the conferences

    - requests for research collaboration involving collection of additional data beyond that provided by the earlier study (follow-up studies of faculty, longitudinal follow-up of students who had participated in the earlier study, evaluation studies of specific programs on the campus)

    - development of new programs, changes in institutional structure or other evidences of actual changes within the institution

A Word of Caution

In the pages to follow we will try to quantify the effectiveness of these conferences along the three criteria specified above. We will also attempt to relate effectiveness in a systematic manner to certain internal and external factors which may be operating to account for differential effectiveness. Still it is important to note that most of what we have to say is highly exploratory and speculative in nature. Many factors beyond what we could control or measure were varying in ways that might have strong effects on how we interpret differences that emerge. Perhaps even more important, however, is the fact that these institutions' relationships to external agencies, be they research organizations, governmental agencies, foundations or other educational institutions, are highly complex and constantly in flux. How they, and other institutions like them with relatively limited economic resources, utilize external inputs along with their internal resources of various kinds to further their own development is one of the most pressing questions facing education today. Our experience, limited as it is by the number of institutions included in the project and the complexity of the topic, hopefully will be helpful not because it provides any veritable truths but because it may contribute to an on-going discussion of these issues.

III. Results

This section will be divided into three parts according to the criteria described above for evaluating the effectiveness of the conferences: (1) Responsiveness of the institutions to the initial proposal for the conferences, (2) reactions and evaluations by participants of the conferences themselves, (3) utilization of the research results in the year following the feedback conferences.

Institutional Responsiveness to the Initial Proposal for the Feedback Conferences

Responsiveness to the Initial Letter

One of the ways in which the institutions could and did differ in responding to the proposal for feedback conferences is how immediately and enthusiastically they responded to the initial letter sent to the presidents of the eight schools. The presidents of two institutions replied immediately; four others responded within the next month. We still had not heard from the remaining two institutions at the end of a two-month period, at which point a follow-up phone call was made.

In addition to these differences in timing, the replies also varied in other indicators of responsiveness. For instance, the presidents who replied immediately also indicated that steps were already being taken to implement the idea. In one case, the president had delegated responsibility for working out arrangements for the conference to the person who had previously acted as a liaison to the research project. In the other case, the president mentioned that a special committee, including the liaison person, had been appointed to work out the arrangements with us. The other six letters were much less enthusiastic. Generally, they reflected some interest but did not indicate that the institutions were moving ahead with any concrete plans for the conferences. Two of these less enthusiastic responses were cast in terms of "letting the research staff do what it wants" rather than expressing active interest in the project. One other president replied with a pleasant but clear message that if and when the school wanted to discuss the study results he would let us know.

Although we were disappointed at this somewhat less than enthusiastic response, there was a common note in four of the letters which seemed to explain part of this institutional cautiousness. This common note was a specific request for a written report of the study before the institutions proceeded further with the idea of carrying on discussions about results in group meetings on the campuses. Our original plan had been to run the conferences before the final report of the study was completed in the hope that these discussions would be helpful in interpreting the study results in a meaningful way. Of course, we had planned to provide written materials for the conferences - tables, charts, summaries in written form. It was clear, however, from the presidents' replies that they wanted more than this type of material before they committed themselves to investing time and energy in the feedback conferences. Since the final report of the study to be submitted to the Office of Education was not to be completed for several more months, we suggested contacting the schools again after the report was ready.

Five months later, at the beginning of the next academic year, the final reports and an appendix with tables prepared for each school making comparisons that were relevant for that particular school were sent to the presidents of all the institutions. As a matter of fact, these materials were sent to all ten institutions, not just the eight where we hoped that conferences would be possible. To some extent, the value of attempting this kind of feedback process is reflected in the fact that we never heard again from the two institutions which received the materials but were not asked to become involved in discussing the results with our staff. In contrast to this lack of response, and in contrast to the earlier cautious replies from six of the eight conference schools, we received relatively enthusiastic responses from all but one of the schools after the presidents and other people at the colleges had had a chance to look at the written reports.

This difference between level of institutional responsiveness before and after they had the chance to look at the final report points to one important result of our experience. The original plan of asking for the schools' participation in the conferences before completing the final report presumed a level of trust in us and confidence in the study that was quite unrealistic on our parts. Although the schools had been very cooperative during the data collection phase of the study, they understandably were reserving their reactions and commitments to an on-going relationship with us until they were able to look at the way the study results were presented to the public. Had this study been solicited by these institutions, they might well have reacted quite differently, viewing the reporting of results as a service to them. Furthermore, the issue of control and use of data is realistically more problematic when the participating institution is simply cooperating with another organization's research plan. This seems to be one way in which dissemination of research results is highly conditioned by the nature of the original agreement with the participants. Furthermore, in addition to this general problem that was generated by the asymmetrical relationship implied by our original agreement with the schools, there were certain experiences these schools were having right at that time which made their caution even more understandable. Around that time several of these institutions were being scrutinized in a number of public documents. The McGrath report (1965) had been published; several articles about predominantly Negro colleges were then available in national magazines; the recent Jencks-Riessman (1966) article, which produced such a storm of controversy, had been seen in manuscript form by several people on these campuses. Reactions to these publications may well have added to a general problem that is experienced by most, if not all, organizations when research results bearing on their functioning are made available to the public. The fact that we had promised to preserve the anonymity of the schools in any published materials may have relieved the problem somewhat. Nevertheless, we learned from these events that it is highly unrealistic to expect openness and trust in an outside research organization under the conditions that originally had been set up for the feedback conferences.

Involvement of Institutional Representatives in Planning the Conferences

Once all eight schools had agreed to go ahead with the conferences, we began working on trying to achieve as full institutional involvement as possible in planning the conferences. This was important for two reasons: (1) The work of Mann and associates has shown that subsequent involvement or organizational members in the actual feedback meetings is greater when someone from the organization has a hand in the planning process, (2) selecting material that would be personally relevant to participants in the conferences would be difficult to do without the help of people who knew the institutions much better than the outside research staff.

By the time we began planning the conferences we had already had some experience which highlighted the importance of working closely with representatives from each school. As mentioned earlier, we had tried to obtain advice from the institutions regarding the type of results they would like to look at by attaching to the initial letter to each president a set of topics that might be relevant for the conferences. Since the list was much too long for all topics to be covered in the course of a single conference, we had specifically asked for priorities among the topics. This technique had not been very helpful. The standard response, consistent with the general caution we have already discussed, was that all the topics looked appropriate. Therefore, we felt we were not likely to do an adequate job in either selecting materials or in assuring that the conferences would be conducted in a manner that would reduce sentivities and threats without the full collaboration of someone from each institution.

In phone conversations with either the president or the person delegated by him to handle the conference arrangements, we raised the possibility of conducting a planning meeting to be held either at the participating institution or with institutional members visiting the University of Michigan. Since this had not been planned in the original proposal to the Office of Education, these planning meetings promised a financial problem for us. Still, as the project proceeded, they seemed so desirable that we went ahead. As it turned out, these planning sessions took place at only four of the eight institutions. At the remaining four, the person delegated to handle the conferences (at three schools the Dean of Academic Affairs and at one the Dean of Students) merely talked with us by phone in the course of preparing for the meetings.

Why the schools varied in responding to the idea of planning meetings is not very clear. On the face of it, it was simply felt at four schools that such meetings were not necessary, that the arrangements could be handled adequately by phone or letter. When we examine something about the institutional characteristics of the four schools making a positive response and the four where the planning meetings did not occur, we learn very little that would explain this difference. Let us look first at the four where planning meetings were conducted. Two are private and two are public; two are considered academically among the highest rated schools while the other two are rated somewhat lower; on the basis of the student study data, two of the schools have unusually high aspirant student bodies while the other two are schools where the students have somewhat lower aspirations and, in the past, have enrolled in graduate schools in fewer numbers. Finally, although it is true that three of these schools were considered rather "low constraint" schools on the basis of administrative handling of civil rights demonstrations, this was equally true of the schools with less enthusiastic response to collaborative planning. Thus, there is sufficient variation within this group of schools that it is hard to draw a distinctive picture of responsiveness. Moreover, the four less responsive schools are very similar on all these dimensions.

Although these internal characteristics of the institutions seem to have little to do with their responsiveness to collaborative planning, the issue of command over external resources does seem to be important. The schools with the largest government and foundation grants tend also to be those where active collaboration in planning the conferences occurred most readily. How have we measured this external input factor? It is a gross measure that involves two major sources of financial support: (1) grants and contracts from the federal government, and (2) grants from two foundations which, during the years of 1964-67, had made the largest contributions to predominantly Negro colleges. This does not mean that these were the only sources of support actually available and utilized by the schools participating in the research project. But, apart from state appropriations to the publicly-supported institutions, the federal government and these foundations were the major resources that were available for sizable grants. Thus, the question of how these schools differ in their command of resources from these sources tells us something about their involvement with very important external agencies. Of course, any time we use their differences with respect to these external inputs as a possible explanation for their differences in responding to the feedback conferences or in utilizing the research results after the conferences, we must be careful to examine whether the explanation fits after controlling for type of sponsorship of the institution. Public schools might be expected to command fewer of these other external resources because of their dependence on state funds. For instance, what is the situation with respect to the possible impact external resources may have in explaining how responsive the institutions were to the notion of collaborating in planning the feedback conferences? The four schools where collaborative planning did take place did have significantly greater financial support from these two types of sources; furthermore, this is not explainable by type of sponsorship since two of these four are public schools and two are private schools. Moreover, the four schools where there was no preconference collaboration and which together had less financial support from these outside sources also involve both publicly and privately supported institutions. Thus, there seems to be an association between size of external inputs and responsiveness to the conferences, an association that may come from the experience of schools with the larger outside grants in dealing with outside agencies. Their experience with these funding agencies may encourage cooperative and collaborative arrangements even with agencies that are not involved in financial assistance. It is also possible that the existence of greater financial support from recent grants enhances the desirability of the research input. Discussing the implications of research would seem to be a more desirable undertaking either when money is currently available or when there is a belief that outside funds are obtainable to do something about the ideas generated by such discussions. The schools which already had more successfully tapped external resources might well be expected to respond more enthusiastically to the feedback conferences.

Still another important, and in our eyes critical, factor accounting for which schools collaborated in planning the conferences seems to lie in the previous relationship that our staff had had with the person within the institution who had acted as our liaison throughout the course of the study. It was this liaison person who had been given the responsibility for the conferences at the four schools where there was a positive response to working closely with us during the planning process. Furthermore, our relationships with these four people during the previous year had gone beyond handling the administrative detail necessitated by the research project. In all four cases, there had been long discussions about the goals and objectives of the institutions, administrative relationships on the campus, the nature of student needs, the liaison person's own goals in working at the college. Although relationships with the liaison people at the other four institutions had been friendly, and certainly as efficient and effective simply with respect to carrying out the study, they had not involved these more expansive discussions. Another striking difference is the extent to which the liaison persons at the two groups of schools had involved us with other faculty and administrative people on the campus. The more expansive relationships at the one group of schools had also involved meeting more people, both in official and social settings. In contrast, at the other schools we had met very few people beyond those who, because of their official positions on the campuses, had to be involved in the study.

Of course, this analysis does not explain the reasons why the relationships throughout the study had been so different in the two groups of schools. One fact is clear. It does not have to do with the particular positions of the various liaison persons on the campuses. At both groups of schools, two of the liaison people were academic deans, one a dean of students, and one a faculty member. If we were to speculate about the reasons, the more important factors seem to lie in the liaison person's area of academic specialization and his perception of the study as an opportunity to advance some of his own objectives for the institution. In what ways do these factors seem to have affected the relationships? In the first place, all four of the people with whom the more expansive relationships developed were either social scientists or trained in social research methods in addition to their current experiences in different institutional positions. Still more significant, perhaps, is the fact that none of them were identified with the two professional disciplines represented by the research staff, sociology and social psychology. Instead, they came out of allied social science fields or educational research. In contrast, one of the four liaison people with whom we had much more formal relationships was trained as a sociologist and three as physical scientists. As a group they were either less familiar with social science research or, in the case of the sociologist, so versed in the content and methods that the outside research organization may have been resented for intrusion in his own area of expertise. Of course, we should be cautious about generalizing from this one case, a person whose own research had been in the area of mobility and aspiration, and the other four social scientists whose disciplines and research were somewhat more removed. Still, there may be something to the issue of what areas of expertise are represented in the interactions of outsiders and members of the organization being studied, particularly when that organization is smaller, less affluent, or in some other way a more "developing" institution. It may be much easier to respond with minimal sensitivity and threat to an outside research organization when one is close but not too close, sharing the general research perspective but not having an identical professional identity. In such a situation, the second factor which we think may have operated is perhaps more likely to occur. It may be easier to see the study as an opportunity to advance one's own objectives for the institution. All four of the people with whom the more open and extended relationships developed have subsequently used the research for specific programs and reappraisal of institutional objectives that are in line with their own concerns and change objectives. (We will return to this point in discussing what happened during the year following the feedback conferences.)

The preceding analysis of the reasons why the relationships had differed at these institutions even before the feedback process was undertaken may not point to all the underlying factors by any means. Even so, it is important to highlight how crucial such relationship factors may be for effective dissemination of research results. Too often researchers, in discussing how well utilized their research results are, look for causal factors only in the institution under investigation.[1] Indeed, even the concept, "responsiveness of the institution," implies something about the institution itself rather than something about broader environmental factors or about the institution's relationship to external agencies. Yet, it seems clear to us that it was the relationship to the research staff itself that was really the critical factor in accounting for institutional differences with respect to at least this one measure of "responsiveness."

Involvement of Participants Across the Organizational Hierarchy

Institutional change may occur in a number of ways. It may occur simply by fiat when top decision-makers decide the changes. It may come about by instigation and support of persons in positions at lower levels of the hierarchy. For instance, there are many evidences in recent years of changes in higher education institutions that have been brought about in response to student protest. But at least in the consensus model of social change, change should have the greatest possibility of occurring when it is supported and legitimized at all levels of the hierarchy. Therefore, one of the goals of the dissemination conferences was to discuss results with both top decision makers and people in positions at lower levels of the organizational hierarchy. It was particularly hoped that this latter category would include students as well as faculty members.

Since this cross-hierarchical participation was suggested at all the schools, the actual composition of conference participants is another meaningful indicator of institutional responsiveness. Three patterns of participation occurred in the eight institutions.

One pattern restricted involvement to top-level administrators. Three of the schools responded to our suggestion by including only top-level administrators, generally the heads of academic divisions, the dean or heads of student personnel services, and the general academic dean. However, at none of these three conferences did the president himself take part. Thus, this pattern can be characterized by the president delegating responsibility to the academic dean while at the same time restricting the inclusion of persons at lower levels of the hierarchy. At none of these schools did any faculty members who were not also serving in some other official higher level administrative capacity, nor any students attend the feedback meetings. At two of these three schools the meetings had been planned without any collaboration with the research staff. The other school, where we had worked closely with the liaison person, was an institution where this kind of restriction was the characteristic mode of decision making and policy discussion. The liaison person felt it would simply not be possible to proceed any other way, at least at the initial presentation of results. At this school and one other of the three, several meetings were set up over the course of a two-day visit by the research staff. At both of these schools the first meeting included only the usual administrative group on the campus. It was followed by a series of individual meetings with persons in this group according to their particular functions in the institution. At the third school the meeting could hardly be called a conference. Since this was a school where we had had minimal collaboration in planning the conference, we arrived very uncertain about what was to happen. What did happen was a meeting, apparently called only a short time before our arrival, which was attended by only four people. They were all top-level administrators - two deans, head of student personnel and head of the business office of the college. This school was our clearest failure.

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[1] We do not mean to imply that researchers alone err in this direction. How often do therapists in trying to account for the outcomes of therapy talk about the therapist-patient interaction as well as characteristics of the patient? How often do teachers in accounting for achievement of their students talk about teacher-student interaction as well as pupil characteristics?

The other two patterns are quite similar, both involving a wide cross-section of institutional members but differing in whether the president attended. At three of the five schools the president did take part, at the other two he did not. By and large this pattern is a positive response to all our suggestions. In all cases these conferences included both faculty members and students; there was no case where a school agreed to include faculty members but not students. At all of these schools there was a series of meetings which will be described more fully when we discuss the participants' evaluations of the conferences.

Two factors stand out as being important in accounting for these quite different patterns of response. One has to do with the nature of the organizational structure in the institution; the other has more to do with the previous involvement of the research staff with the institutions. The one factor which seems to have little to do with conference composition patterns is size of external financial inputs to the institutions. Of the three schools with quite restricted participation, one is an institution with very sizable command of external resources, sizable enough that as a group these three schools do not average less than the group of schools where participation included a wide cross-section of organizational members.

Nature of the Organizational Structure. It was mentioned earlier that four of the original ten schools were institutions where we thought there would be difficulty in obtaining wide involvement in the conferences. Two of these four schools were not selected for the conference project; two others were. These schools might be described as having relatively "vertical structures," institutions in which boundaries between hierarchical levels are fairly rigid. Typically, the faculties have little authority, little involvement in decision making, and little access to top administrative decision-making bodies. Moreover, the students in these schools have practically no experience participating on committees with administrators or faculty. Therefore, it was not surprising that two of the three schools[2] which restricted involvement in the conference to top administrators were these two where we had anticipated difficulty because of their organizational structures. These two schools responded to the conferences much as they would to any other administrative process, restricting participating to the usual administrative officers concerned about the administrative affairs of the institution.

These observations about these two schools are supported by data from the student study and from one question asked in the Reaction Form filled out by the administrators at the time of the conferences. Let us look first at the data obtained from students in the earlier study.

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[2] The third school which restricted participation in the conference is not so easily describable in these terms. Something else, discussed below in the section on the research staff relationships to the schools, seems to have been operating in that particular case.

Students in all institutions were asked a series of questions regarding who ought to make decisions about student regulations - the college administration alone, the students alone, or the college and students working together. The eight questions in this series covered three areas of regulations: traditional locus parentis regulations, regulations in the broad area of academic freedom, and regulations in the specific domain of civil rights activities. What might be considered three models of administrative-student relationships emerged from the analysis of these questions.

One model can be described as the CONSENSUAL-INTEGRATION MODEL. It represents schools where a large majority of students feel that these kinds of regulations should be decided by administrators and students working together. The prototype of this model is one school where 80 percent of the students endorsed the idea of joint decision making on all but two of the eight questions. A second model can be described as the STUDENT POWER MODEL. It represents the situation where large numbers of students feel that the students alone should make these kinds of decisions. Only one of the ten schools could be described as really fitting this model. It is a school where at least 60 percent, and on several of the questions 80 percent, of the students endorsed the notion that students should decide these regulations themselves. At the time the original data were collected, no other school was even close to this conception of administrative-student relationships. The third model might be described as the ISOLATION MODEL. It is characterized by an interesting split among the student body, a large proportion feeling that the administration alone should make these decisions, but also a large proportion feeling that the students alone are the appropriate decision makers. What is singularly lacking in the schools fitting this model is any widespread endorsement of the idea that administrators and students should work together.

Two of the schools that best fit the ISOLATION MODEL of student-administrative relationships are the same two which are described above as having relatively "vertical structures" and which restricted participation in the conferences to top administrators. Thus, these data based on student perceptions support our view that these are schools where student involvement in the conferences would have been quite difficult to achieve. Student opinion regarding these matters is also supported by answers the administrators themselves provided in the Reaction Form filled out at the conferences. They agreed that students rarely, if ever, serve on policy discussion committees with faculty or administration. Thus, it is not surprising that these two schools expressed considerable caution about involving students, and even faculty members, in the conference proceedings. If the traditional locus of decision making is the administrative apparatus in isolation from participation of other institutional members, it is natural that these schools would respond to the notion of wide involvement in the conferences in a somewhat negative manner. Reaction to the conference seems to reflect their traditional modes of relationships across organizational levels.

Previous Relationship Between the Research Staff and the Participating Schools. The nature of the research staff's relationship with the third school which had restricted participation at the feedback meeting seems to be more important than its organizational structure in accounting for its pattern of participation. This school does not fit the Isolation Model described above; as a matter of fact, both students and faculty take part in numerous policy and decision-making committees at this institution. Nevertheless, only four top-level administrators met to discuss the study results. Moreover, as mentioned earlier, this meeting had a quality of indifference to it, a sense that the group was going through the motions merely out of politeness rather than interest in the school's results. On every measure of responsiveness, this school turns up as the least responsive. Why was there such a failure at this school? The most striking factor has to do with the staff's previous relationships with that school. It had been a situation where relationships with the academic dean and other people whom we met in official capacities were congenial and friendly, but restricted exclusively to getting the job done. When the research staff stayed on the campus, we were housed at the college inn and never invited for informal social relationships with people on the campus. The potentiality for such informal contacts appeared unlimited on that campus, in contrast to a few schools where our activities on the campus were closely supervised and where informal relationships were clearly restricted by someone in authority. In other words, the lack of meaningful contact on this campus during the course of the study seemed not to be a matter of administrative caution in handling outsiders; it seemed more a matter of polite indifference that may be explainable largely by our own approaches and actions. Had we established contact with even one person who considered the study instrumental to his own goals and objectives on the campus, the relationships might have developed quite differently. Still, no matter why the relationships had been so formal, the fact that they had been makes understandable the very perfunctory way in which the feedback process was handled at this school. It was the one school where the president had not yet replied to our initial letter after a two-month period; there had been no collaborative planning in preparation for the conference; the liaison person was not a social scientist who might have been particularly interested in the study and the one other person with whom we worked in an official capacity was perhaps so closely tied to social science that the study was perceived as a threat; and we had not, at the time of the feedback process, developed any other relationships on the campus with people who might have seen the study as an opportunity to advance their own ideas for program development or institutional change.

Summary of Responsiveness to the Proposal for Feedback Conferences

We have looked at three indicators of institutional responsiveness to the conference proposal: responsiveness to our initial letter about the conferences, responsiveness to involving representatives in planning the conferences, and responsiveness to our suggestion about cross-hierarchical composition of the conferences. By combining these three indicators, it is possible to rank order the institutions in a general way. As can be seen below, there are four ordinal groups which vary from very high to very low responsiveness. (See Table 1.)

In the next two sections, where we will examine reactions to the conferences themselves and utilization of the research in the year following the conferences, we will be interested in degree of effectiveness with schools that already varied in how responsive they were by the time the conferences were held. Did the participants in conferences at the most responsive schools evaluate them much more positively than participants at schools which were, in some ways, already less responsive? Have the follow-up requests for continued relationship with the research staff in the year following the conferences been restricted to the schools that were originally the most responsive?

TABLE 1

Level of Responsiveness of the Eight Schools

High Responsiveness High responsiveness to initial letter Collaboration in planning conferences Wide involvement of organizational members in conferences	One school
Moderately High Responsiveness Moderate responsiveness to initial letter Collaboration in planning conferences Wide involvement of organizational members in conferences	Two schools
Moderate Responsiveness	
1. Moderate responsiveness to initial letter No collaboration in planning conferences Wide involvement of organizational members in conferences	Two schools
2. High responsiveness to initial letter Collaboration in planning conferences Restricted involvement of organizational members in conferences	One school
Low Responsiveness Low responsiveness to initial letter No collaboration in planning conferences Restricted involvement of organizational members in conferences	Two schools

Evaluation of the Conferences by Participants

Description of the Conferences

The conferences at the three schools, the three already described as restricting participation, were quite small. The one where only four people met to discuss results is not included in the following evaluation, since it could hardly be called a conference. The conferences at the other two schools with restricted participation included approximately thirty people. At the remaining five schools where participation was much broader, the conferences were also considerably larger. The size of these conferences ranged from fifty participants at the smallest to a hundred participants at the largest.

Three different patterns were followed in the conferences. One pattern, used at two schools, involved just a *general session* that was attended by all participants. At this general session the research staff made a formal presentation of study results; the formal presentation was then followed by questions and discussion in the general session itself. A second pattern, also followed at two schools, began with this kind of general session but also included later discussions in much smaller groups that represented functional units of people with common interests. Examples of these functional units are: (1) faculty of the various academic divisions within the school, (2) student groups assembled by class level, by dormitory residence, or by extracurricular activity groups, (3) staff and student personnel services, and (4) deans' councils, etc. This pattern might be called a combination of general and functional sessions. The third pattern, followed at three schools, involved just the small functional groupings without the preceding larger and more general session.

Evaluation

Three questions are of interest in evaluating the conferences themselves. One has to do with whether the seven institutions where conferences were held differ, in an overall sense, in the participants' reactions to the conferences. The second concerns whether these overall institutional differences can be accounted for by level of institutional responsiveness, as discussed in the above sections. Did the participants in conferences at the most responsive schools evaluate them much more positively than participants at schools which were already less responsive at the time the conferences were held? A third question has to do with whether these institutional differences can also be explained by the nature of the conferences themselves. Did participants in conferences that involved only the general session have somewhat different reactions from participants who experienced the small functional groupings that were used at some of the schools?

In order to explore these last two questions, it is important to determine whether responsiveness of the institution is related in some way to the kind of conference that was held at the institution. As we can see in Table 1, such a relationship does exist. The two schools where only the general sessions were held are also two schools with relatively low responsiveness; in contrast, the three schools where just the small functional groups were used had been more responsive all along. Despite this relationship, there is a way the effects of the different types of conferences can be investigated independently of how responsive the institutions had been. It involved examining the reactions of participants in schools which had the same level of responsiveness but which differed in the kind of conferences that were held. It will be noted in Table 2 that there are three such schools, the three with moderate responsiveness, one of which had only a general session, one a general session followed by discussions in small functional groups, and one just the small functional groups. The evaluation Reaction Forms were filled out by participants at the conclusion of the general session in the first type of conference, after the functional groups had met in the second, combination type, and following the small groups in the third type. Of course, by using only three instead of all seven schools, it is possible we are also picking up some idiosyncratic institutional differences that have nothing to do with the kind of conferences that were held. Still, as an exploratory evaluation, it seems wise to follow this procedure so that we are at least clear that differences which are associated with nature of the conferences are not merely reflecting the issue of institutional responsiveness.

Nature of the Evaluation Data. Participants at the conferences were asked to fill out a Reaction Form evaluating several aspects of the conferences (see Appendix). These reactions can be classified into four categories: (1) judgments of the clarity with which results were presented, (2) questions about

TABLE 2

Relationship Between Responsiveness of the Institutions and Nature of the Conferences

Level of Institutional Responsiveness	Nature of the Conference Groups: Schools With General Sessions Only	Schools With General Sessions Followed by Discussions in Small Functional Groups	Schools With Small Functional Groups Only
High Responsiveness	-	1	-
Moderately High	1	-	2
Moderate	1	1	1
Low Responsiveness	1	-	-

validity of the results, (3) judgments of the usefulness and action-relevance of the results, and (4) desires for follow-up and continuing discussion of the results. The specific statements under these four categories can be seen in Tables 3, 4 and 5. Participants were asked to express their degree of agreement with all the statements listed in these tables, using a four-point rating scale ranging from strongly disagree to strongly agree. Low scores in these tables indicate strong disagreement; high scores represent agreement.

Analysis of Reactions. Let us look first at the participants' reactions to clarity of the presentation of results. As a whole, the seven institutions do not differ significantly in how the conference participants reacted to either of the following statements: "The results were not very clearly presented," and "I had some trouble understanding some of the results." Generally, the participants reacted positively to how clearly results were presented; the mean ratings at almost all the schools fall between 1.4 and 2.0 or between "strongly disagree" to "disagree" (see Table 3). It is also clear from Table 4 that ordering the institutions according to their level of institutional responsiveness does not result in differences in participants' judgments of the way results were presented. In contrast, there are some differences in reactions as a function of the kind of conference that was held at this school (see Table 5). Looking at the three schools with moderate responsiveness which varied in the kind of conferences that were held, it can be seen that people attending the conference with only the general session expressed more difficulty in understanding the study results than people who participated in the conference with small functional groups. The school with the combined procedure shows mean ratings that fall between the two. This result supports what might be expected as one of the positive consequences of discussing results in small functional groupings - increased understanding of the results that can come because of fuller discussion and ease of asking questions in a small group.

When we turn to questions about validity of the results, we find that the seven institutions do differ significantly in participant reactions and that these differences are related to both institutional responsiveness and nature of the conferences that were held. Participants in certain schools were more likely to say, "I wonder about the validity of some of the results"; this was particularly true in the schools with the least responsiveness to the whole idea of feedback conferences and also more characteristic of participants attending the conferences that included a general session instead of just the small discussion groups. Both of these results may reflect the importance of institutional involvement for creating trust in the study. This is not to say that some scepticism about the validity of research results is unwarranted - results from this study or any other. Indeed, from all the reactions covered in Tables 3, 4 and 5, we can see that questioning the validity of results is the most frequently expressed negative feeling. Still, the fact that this questioning is greatest at the school where the research staff had had the least contact and where the president had expressed great cautiousness about holding the conferences supports the view that institutions may need to be fairly involved in the research process if their members are to have even a realistic level of trust in the results. Similarly, the fact that validity was questioned least in the school where discussion of the results was greatest, the school with the small functional groups as the major format of the conference, also speaks for the importance of involvement.

A third category of reactions concerns the participants' judgments of how useful or relevant the study results were. Two of the statements classified in this category show rather similar results. "I was surprised by some of the results" and "The comparisons of different departments within our school are more helpful than the comparisons of our school with others that participated in the study." First of all, the seven institutions do differ significantly in how the participants reacted to these two statements (see Table 3). Furthermore, even though there are significant differences as a function of institutional responsiveness, we can see in Table 4 that there is not a linear relationship between degree of responsiveness and degree of agreement with these statements. Instead, these overall institutional differences may be better explained by how striking the study results were in the various schools. It is our judgment that the results for certain schools were clearer and more consistent such that it was possible to say something both unique and perhaps unexpected about their students and the students' reactions to the college environment. At some schools this was less true. Moreover, which schools showed the more striking study results was unrelated to how responsive the institution had been. It happened at one school that had been relatively unresponsive about the conferences while it was not true of two schools that were unusually responsive. If our judgments are correct, responsiveness of the institution should not be expected to differentiate how surprising the results were for the conference participants. In addition, it is our feeling that there were certain schools where the within-school departmental differences were much more sizable and, therefore, more interesting for the participants. The data for some schools showed considerable departmental variation, while for others showed very little. Again, which schools these were had little to do with the question of responsiveness. On the other hand, the type of conference that was held does relate to how the participants reacted to within- versus between-school comparisons (see Table 5). Participants at the conferences which utilized the small functional groups were most likely to agree that the within-school comparisons were the more important or useful. Participants at the school where only a general session was held tended to feel that the between-school comparisons were more useful. This means that the maximum usefulness of within-school data occurred in a situation where the conference procedures encouraged discussion of factors within this school. After all, many of the small functional groups were organized according to departmental affiliation; certainly such groups should be particularly interested in and find unusually useful the results which dealt with departmental or divisional differences.

In contrast to what seems to explain these two very specific reactions about the usefulness of the data, it is primarily the responsiveness of the institution that differentiates which participants had a general feeling that they acquired useful knowledge in the feedback meetings (see Table 4). It is particularly in the responsive institutions that the participants felt most strongly that they did "see something in the results that would be helpful to their own work at the institution" and most rejected the idea that they "did not acquire any useful knowledge in the meetings." The type of conferences that were held seems to have less to do with this general evaluation of usefulness and action relevance, although there is some tendency for participants in the functional groups to feel that the results were more useful to them.

The other statements classified as having something to do with judgment of usefulness do not show any major institutional differences. For instance, the institutions do not differ in how the participants reacted to the idea that "it would be difficult to apply these results" or to the notion that they "would find this kind of meeting more valuable if more stress were put on the implications of the results." What is interesting is the fact that participants in most of the conferences agreed that there should have been more stress on action implications in the conferences.

The last category of responses has to do with desire for follow-up and continuing discussion of the results. All the schools were more positive than negative about continuing the discussion of study results. As can be seen in Table 3, the mean ratings fall somewhere just below "agreement" up to "strong agreement." Still, the schools do differ quite a bit in the extent to which participants expressed this kind of desire. Both level of institutional responsiveness and nature of the conferences seem to be important in differentiating which institutions were particularly eager to continue consideration of the study. Particularly in the most responsive schools, and particularly in the small functional groups, the participants expressed the strongest desire to "have more meetings like today" and "to explore the results in more detail." There is one way, however, in which responsiveness of the institution but not nature of the conference groups distinguishes reactions about follow up; that has to do with the desire for faculty and students to discuss the study results together in a continuing manner. Participants in the least responsive school were much less likely to say this; in fact, there is a linear relationship between positive reactions to faculty-student discussion and responsiveness of the institution to the feedback process. This should not be surprising since positive institutional response to the idea of including students in the conferences was one of the criteria for calling a school highly responsive. These results from the conference Reaction Forms further support other data about the institutions' traditional modes of communication. At the two schools where no students were included in the conferences (the least responsive schools), the participants were also least positive about the idea of discussing the results with students at a future time.

Summary of Evaluations of the Conferences

Participants at the seven institutions where conferences were held differ in numerous ways in their evaluations of the conferences. Participants at certain schools were less likely to question the validity of the study results, felt that the results were more useful to them in their own work at their institution, and expressed greater desire for continued discussion of the results.

TABLE 3

Institutional Differences in Reactions to the Conferences

	Institutions						
Reactions to the Conferences	A	B	C	D	E	F	G
N =	100	34	68	30	80	84	52
Clarity of Presentation							
The results were not very clearly presented.	1.5	1.6	1.5	1.4	1.5	1.6	1.7
				NS			
I had some trouble understanding some of the results.	1.9	2.0	1.4	2.2	1.7	2.0	1.8
				NS			
Questioning of Validity of Results							
I wonder about the validity of some of the results.	2.2	3.0	2.6	3.1	2.4	2.2	3.1
				F significant at .05			
Every school (division, department) is different from every other one. You can't generalize.	1.8	2.1	2.1	2.0	2.2	1.9	1.7
				NS			
Usefulness and Action Relevance of Results							
I was surprised by some of the results.	3.2	1.6	3.0	3.1	2.8	1.9	2.2
				F significant at .01			
The comparisons of different departments within our school are more helpful than the comparisons of our school with others that participated in the study.	2.7	2.1	2.4	1.6	3.6	2.8	2.8
				F significant at .01			
It was an interesting meeting but I don't think I acquired any useful knowledge today.	1.3	2.3	1.6	1.8	1.5	1.5	2.0
				F significant at .05			
It would be difficult to apply these results (to do anything about the issues raised today).	1.7	2.0	1.7	1.9	1.5	1.8	2.3
				NS			
I would find this kind of meeting more valuable if more stress were put on the implications of the results.	3.0	2.9	2.8	2.9	2.6	2.7	3.0
				NS			
I would not want the research team to suggest what ought to be done about the results; that is our job.	2.2	2.5	2.7	2.6	2.5	2.4	2.5
				NS			
Do you see anything in the results that would be helpful to you in your work? (4 point scale, high scores = greater usefulness)	3.6	1.6	3.2	2.6	3.3	3.0	2.9
				F significant at .05			
Desires for Follow Up							
I would like to have more meetings like today.	3.8	2.5	2.8	2.7	3.6	3.5	3.5
				F significant at .05			
It would be valuable for faculty and students to discuss these results together.	3.8	2.9	3.6	3.0	3.7	3.6	3.4
				NS			
I would like to explore the results in more detail.	3.8	2.7	3.6	2.8	3.7	3.5	3.2
				F significant at .05			

TABLE 4

Relationship Between Prior Institutional Responsiveness and Reactions to the Conferences

	Responsiveness of Institution Prior to Conferences			
Reactions to Conferences	High (1 school)	Moderately High (2 schools)	Moderate (3 schools)	Low (1 school)
Clarity of Presentation				
The results were not very clearly presented.	1.5	1.5	1.6	1.6
		NS		
I had some trouble understanding some of the results.	1.9	1.8	1.7	2.0
		NS		
Questioning of Validity of Results				
I wonder about the validity of some of the results.	2.2	2.3	2.9	3.0
		F significant at .01		
Every school (division, department) is different from every other one. You can't generalize.	1.8	2.0	1.9	2.1
		NS		
Usefulness and Action Relevance of Results				
I was surprised by some of the results.	3.2	2.3	2.8	1.6
		F significant at .01		
The comparisons of different departments within our school are more helpful than the comparisons of our school with others that participated in the study.	2.7	3.2	2.4	2.1
		F significant at .05		
It was an interesting meeting but I don't think I acquired any useful knowledge today.	1.3	1.5	1.7	2.3
		F significant at .05		
It would be difficult to apply these results (to do anything about the issues raised today).	1.7	1.7	1.9	2.0
		NS		
I would find this kind of meeting more valuable if more stress were put on the implications of the results.	3.0	2.7	2.9	2.9
		NS		
I would not want the research team to suggest what ought to be done about the results; that is our job.	2.2	2.4	2.6	2.5
		NS		

TABLE 4 (Cont)

	Responsiveness of Institution Prior to Conferences			
	High (1 school)	Moderately High (2 schools)	Moderate (3 schools)	Low (1 school)
Do you see anything in the results that would be helpful to you in your work? (4-point scale, high scores = greater usefulness)	3.6	3.2	2.9	1.6
		F significant at .05		
Desires for Follow Up				
I would like to have more meetings like today.	3.8	3.5	3.0	2.5
		F significant at .01		
It would be valuable for faculty and students to discuss these results together.	3.8	3.6	3.4	2.9
		F significant at .05		
I would like to explore the results in more detail.	3.8	3.6	3.3	2.7
		F significant at .05		

TABLE 5

Relationship Between Type of Conference Session and Participant Reactions to the Conferences

	Reactions of Participants in Schools With Moderate Responsiveness but Varying in Nature of the Conferences		
Reactions to the Conferences	Schools With General Sessions Only	Schools With General Sessions Followed by Discussions in Small Functional Groups	Schools With Small Functional Groups Only
Clarity of Presentation			
The results were not very clearly presented.	1.4	1.7 NS	1.5
I had some trouble understanding some of the results.	2.2	1.8	1.4
Questioning of Validity of Results			
I wonder about the validity of of the results.	3.1	3.1	2.6
Every school (division, department is different from every other one. You can't generalize.	2.0	2.1 NS	1.7

TABLE 5 (Cont)

	Reactions of Participants in Schools With Moderate Responsiveness but Varying in Nature of the Conferences		
	Schools With General Sessions Only	Schools With General Sessions Followed by Discussions in Small Functional Groups	Schools With Small Functional Groups Only
Usefulness and Action Relevance of Results			
I was surprised by some of the results.	3.1	2.2	3.0
The comparisons of different departments within our school are more helpful than the comparisons of our school with others that participated in the study.	1.6	2.4	2.8
It was an interesting meeting but I don't think I acquired any useful knowledge today.	1.8	2.0	1.6
I would find this kind of meeting more valuable if more stress were put on the implications of the results.	2.9	3.0 NS	2.8
I would not want the research team to suggest what ought to be done about the results; that is our job.	2.6	2.5 NS	2.7
Do you see anything in the results that would be helpful to you in your work? (4-point scale, high scores = greater usefulness)	2.8	2.9	3.2
Desires for Follow Up			
I would like to have more meetings like today.	2.7	2.8	3.5
It would be valuable for faculty and students to discuss these results together.	3.0	3.4	3.6
I would like to explore the results in more detail.	2.8	3.2	3.6

Many of these institutional differences are understandable in terms of how responsive the institutions had already been to the research and to the idea of holding these feedback conferences. It is particularly in the most responsive schools - those where the president had responded at least somewhat positively to our initial letter, even before the final report of the study was ready, where the conferences had been planned collaboratively with the institution, and where the institution had agreed to involve participants at all levels of the organizational hierarchy - that the conferences were evaluated most positively. In the most responsive schools the participants were less likely to question the validity of the results; they were more likely to report seeing something in the results that could be helpful in their own work and to conclude that the meetings did produce useful knowledge; finally, they more frequently expressed a desire for follow up after the conferences, to have more meetings like the conference sessions, to explore the results in greater detail and, specifically, to continue consideration of the study results in conjunction with students at the institutions.

Moreover, it is not only in differentiating the participants' reactions that the issue of institutional responsiveness is seen as important. It also affected the kind of conferences that were held. It was in the most responsive schools that it was possible to conduct meetings in small enough groups and composed in such a way that thorough discussion of the school's results was really possible. In the least responsive schools, the feedback occurred at a single meeting, a general session attended by all participants at those schools, where both the size and the fact that the participants represented diverse institutional interests minimized thoroughness and depth of discussion.

However, it is also true that what kind of conference was held played a part, independently of responsivness of the institution, in differentiating the reactions of participants. This can be seen in differences in the reactions of people who attended three different types of conferences, held at three schools which were equated for level of responsiveness. Where the conference included discussion in small, functional units, the evaluations were more positive in a variety of ways than they were where the conference was organized solely around a general session. Participants who experienced the smaller, functional discussion groups reported greater understanding of the study results; their judgments of the validity of the results was enhanced; they considered within-school comparisons more valuable than data describing differences between the participating schools; they felt the results were somewhat more useful (although differences in judging usefulness as a function of the type of conference that was held are not as great as are the differences associated with responsiveness of the institution); finally, participants in the small groups expressed greater desire for continued follow up and discussion of the results.

Utilization of the Research Results in the Year Following the Conferences

Meaning of Utilization

The original research proposal specified checking a year after the last feedback conference was held to see in what ways the research results had been utilized in these institutions during that year. It will be recalled that we were using two criteria for judging the effectiveness of the dissemination conferences: (1) that they would result in full discussion of research results, and (2) that they would encourage some effects in the institutions in the year following the conferences. In other words, we would consider the process to have been effective if, in addition to full discussion of the study results, the conferences had produced some kind of institutional change or promoted utilization of the research in a continuing way after the conferences.

The specific criteria for measuring effectiveness in the utilization sense included the following: (1) request for further discussion of the study results, (2) request for further data analysis to follow up ideas coming out of the conferences, (3) request for research collaboration involving collection of additional data beyond that provided by the earlier study, and (4) development of new programs, changes in institutional structure, or other evidences of actual changes within the institution. In the sections below, we will be interested in all four of these criteria.

Evaluation

Several questions are of interest in evaluating how effective we were in the sense of seeing the research utilized. First, there is the question of how the institutions differ with respect to what has happened in the year following the conferences. What kinds of requests and follow-up activities have emerged from the different institutions? Another question, one that was raised after the results on institutional responsiveness were presented, is the extent to which these requests for follow up and evidence of institutional effect reflect how responsive the institutions were at the time the conferences were held. A third question of interest is what factors, other than prior institutional responsiveness, seem to be important in accounting for what has happened in the year following the feedback conferences. In exploring the third question, we will be interested in three possible factors: internal characteristics of the institutions themselves, inputs from outside sources that might increase the resources of the institutions, and the relationship between the research staff and the participating institutions.

Institutional Differences. The institutions where the conferences were held differ considerably in all four specific criteria for measuring subsequent utilization of the research results.

1. Further Discussion of Study Results. Liaison persons from three of the institutions reported that there had been continued discussions of the study results following the feedback conferences. In one of these institutions a staff seminar was organized to study the report in detail. This seminar, which included both faculty and administrators, was organized after this particular institution had undergone rather sizable structural changes, most of which were promoted by student unrest and had very little to do with the research itself. The purpose of the seminar was to use the study data as a stimulus for discussing new programs and working out new modes of administrative relationships as this institution began to handle a change from its traditional hierarchical arrangements. Since the seminar began meeting in only September of 1967, it is not clear whether discussions of the study data may eventuate in other effects at a later time. At least the data were being used during this period of internal reflection. At another institution the study was used by an internal evaluation committee, which had been delegated the responsibility for conducting the accreditation association's required self-study. When this committee was appointed, its chairman invited a member of our research staff to visit the campus again and discuss the study with his committee. This occurred in the spring of 1967, about six months after the original feedback meetings. The committee continued to use the study and, as we will indicate below, made requests for further data analysis as well. At the

third school, the requests for further discussions of the results came from the academic dean who wanted the Dean's Council to consider the study in greater detail after the original conferences. Here, too, a member of the research staff was invited to return to the campus to take part in these additional meetings.

2. Further Data Analysis. Two of these same institutions also requested further data analysis to follow up ideas that had been suggested in the conferences. One was the school in which the self-study was being conducted; the other the school where the Dean's Council had pursued the study in greater depth. In addition, a third school asked for some specific analyses that had not been included in the earlier conferences. All three of these requests for further analyses involved specific divisions within the institutions which stood out in some ways in the data presented at the conferences. At two of the schools the data suggested some concerns about students majoring in education. At both schools the education majors showed greater dissatisfaction with their job choices, were less sure that they really intended to enter their expressed occupational choices, and voiced greater criticisms of their academic programs. When these data were discussed, it was suggested that these results might be accounted for primarily by students who had transferred into education as a "last resort." Then, following the conferences, there was a request from both of these schools to follow up this suggestion by comparing the student attitudes of two groups of education majors, those who chose education as their first major and those who transferred into education after having been enrolled in a different division or department within the institution. If the criticisms came equally from the transfers and the committed majors, they would be more difficult to discount or ignore. Thus, in both these cases, the importance of the additional analyses lay in the opportunity to encourage further departmental discussion of a possible problem area. The third school's request for further data analysis involved its rather sizable vocational-technical division. The research results had showed that students majoring in this division were more committed to college than students majoring in a number of the other divisions at the school. Their greater commitment was demonstrated both in placing greater importance on graduating from college and expressing greater certainty that they would finish college. In speculating about the meaning of these results during the conferences, it was suggested by some of the faculty that the vocational-technical students were more committed to college and particularly less likely to drop out of college for a good job because of their opportunities to work in on-campus jobs that are relevant to their majors. They have the experience of gaining work-relevant experiences for which they are monetarily rewarded while enrolled in school much more frequently than students majoring in other divisions. Furthermore, at their current skill level, the technical students probably had greater job opportunity on the campus than they would have in the broader job market. Thus, it was argued that these work opportunities provide the technical students with more incentives to stay in college and fewer incentives for dropping out of college. However, it was suggested that this explanation would best fit the students majoring in building trades since they have more of these skill-relevant job opportunities on the campus than do the students majoring in electronics, architectural design or vocational education. Therefore, if commitment to college is enhanced by opportunities for monetarily rewarded, skill-relevant work on the campus, a further analysis of all the technical students should show that the building trade majors place the greatest importance on college graduation and hold the highest expectancies of being able to graduate. In this example, in contrast to the example in the education divisions where the additional data analysis might encourage confrontation of a problem area, the request had the possibility of supporting

what looked like a positive aspect of the existing program in the technical division. It also had broader implications, beyond the technical-vocational division of that school, and indeed beyond that institution, for unraveling some of the motivational effects of work-study programs.

3. Research Collaboration. These same three institutions which had requested further data analysis also made requests for research collaboration in the year following the conferences. In addition, there was one other school which also expressed this kind of follow-up interest. In all four cases the collaboration involved collecting additional data beyond what was provided by the original study. Two of these schools wanted to conduct longitudinal follow-ups of the students who had participated in the earlier study, students who were originally freshmen and sophomores and were, by 1967-68, juniors and seniors. In these two institutions, it was felt that the opportunity to use the base-line data, collected in the earlier study, for investigating the institution's effect on its students should not be missed. In one case the research staff was asked to provide copies of the instruments used in the earlier study and to oversee the data analysis, pending the provision of outside research funds. In the other case, the longitudinal follow-up study did receive outside research funds and a member of our research staff has worked closely with people on the campus in conducting the study. At still a third of these schools, the person who had acted as the liaison to the earlier study requested our involvement in conducting a study of the faculty and the nonacademic staff at the institution. In this case we assisted in constructing the instruments that were used and in processing and analyzing the data. This collaboration included one visit by our staff to the institution and three visits by this liaison person to the University of Michigan. At the fourth school, the request involved evaluation of a specific program that had been instituted following the feedback conferences, although not necessarily because of the conference itself. It was a special experimental program with freshman students which involved smaller classes, more frequent counseling and residential arrangements such that students who were studying the program also lived closely together. In this evaluation we also participated by helping with instrument construction and continued the collaboration through the data analysis stage.

These three kinds of requests - for further discussion of results, further data analysis and research collaboration - all reflect some investment on the part of the institution. Most of the requests required some financial expenditure on the institution's part, either for bringing members of the research team back to the campus or for conducting actual institutional research. As we can see in Table 6, this investment was considerably larger in certain institutions than in others. Two of the institutions made requests for all three types of follow-up; one institution requested assistance with further data analysis and research collaboration; and two other institutions made requests for at least one of these types of follow-up; finally, three institutions had not requested any follow-up at all.

4. Development of new Programs. Before moving on to factors which may explain some of the institutional differences, we will comment briefly on some other events that occurred in some of these institutions in the year following the study. The original proposal called for contacting the liaison people in all the institutions to see what kinds of programs or other institutional effects may have occurred which they felt might be linked to the feedback conferences. Except for the kind of requests described above, it is very difficult to pinpoint a real connection between the research or the feedback conferences and subsequent

TABLE 6

Institutional Differences in Follow-Up Requests During the Year Following the Conferences

Requests for:	Institutions A	B	C	D	E	F	G	H
Further discussion of study results	x			x		x		
Further data analysis to follow up ideas from the conferences	x				x	x		
Research collaboration in new studies	x				x	x	x	

institutional changes or development. Without exception, the liaison people felt it would be impossible to substantiate a cause and effect relationship. Still several of them did express a personal judgment that the dissemination process had been a helpful, even if not a critical, factor in the new developments or changes. At one school, one of the two from which all three types of follow-up requests had also come, the liaison person reported that changes in the counseling system were, in his eyes, brought about at least partly by the study results. Prior to the study, occupational counseling was available to students in a central counseling center on the campus. During the conferences a specific recommendation was made, primarily by students at this institution, to combine academic and occupational counseling, making it available to the students through their major departments. It was the view of students that a person who was trained in their own area of academic specialization would be most informed about educational and occupational opportunities in that area and, therefore, most likely to be helpful to them. Although there might be some arguments against the students' point of view, it was felt by the departments and divisions in this institution that the suggestion was worth a trial. Additional funds were obtained for providing greater released time for certain members of each division to carry out this combined academic-occupational counseling on a trial basis. In our eyes, this particular program is the development most clearly related to specific recommendations coming out of the conferences. Although there have been some rather sizable changes at certain of the other schools, they are not so easily tied to the research process. For instance, one of the institutions underwent a major structural change, one that was precipitated by student protests and that eventuated in the resignation of the president and a major reorganization of authority relationships in the institution. In a sense, what happened at this school was a preview of what was to come only a year later when several institutions, at least one of which was included in this study, were to see students attempt control of the institution, contingent to obtaining specific institutional changes they desired. The case where this had already occurred by the time our evaluation was under way is one where it would be very difficult to argue that the events had any connection to the research input on the campus. What does seem much clearer is the fact that, following this change, the study results were picked up as a resource that might be useful in handling the transition to a new administrative structure.

Importance of Prior Institutional Responsiveness. The institutional differences seen in Table 6 reflect, in large measure, how responsive the institutions had already been at the time the conferences were held. As can be seen in Table 7, the two schools which requested all three types of follow-up had been highly responsive all along. In contrast, the three schools which had made no requests and, indeed, with whom there has been no contact except the visit with the liaison person specified by the conference project proposal, were schools with relatively low responsiveness prior to the conferences. The other schools, making at least some requests, fell somewhere in between with respect to their earlier level of responsiveness as well.

TABLE 7

Relationship Between Institutional Responsiveness to the Conference Project and Subsequent Follow-up Requests During the Year Following the Conferences

	Extent of the Follow-Up Requests			
Level of Prior Institutional Responsiveness	Schools Requesting all Three Types of Follow-Up	Schools Requesting Two Types of Follow-Up	Schools Requesting Only One Type of Follow-Up	Schools Making no Requests
High responsiveness	1			
Moderately high	1	1		
Moderate			2	1
Low responsiveness				2

Factors Which May Be Important in These Institutional Differences. To point out that these differences reflect institutional responsiveness to the study and the feedback project does not completely explain why certain schools have used the study more than others. Of course, it would be expected that factors which seem to account for prior responsiveness would also help account for what has happened in the year following the conferences. To a large extent this seems to be true. At least the internal institutional characteristic which seems most important in explaining amount of follow-up contact was also important in differentiating which institutions responded most positively to suggestions for composition of the conferences. It has to do with the nature of the institution's organizational structure. It will be recalled that the two schools with the most hierarchically structured authority relationships had not been willing to include among the conference participants either students or faculty members who were not also serving in some administrative position. One of these schools is one where there has been no follow-up since the conferences. Furthermore, although the other school with this kind of structure is one where there has been come discussion of the study since the conference, this happened only after a major change in its organizational structure. The idea of using the study data in systematic evaluation at the institution came from a group of faculty who had supported student demands for institutional change and, after the president resigned, had composed a committee to suggest new organizational approaches. This committee used the research, among other resources, to buttress its evaluation of institutional needs but only after a breakdown in the old hierarchical structure. Thus, in the cases where the requests have been very minimal, part of the explanation may lie in the nature of the institutional structure. Moreover, where follow-up has been sizable, there is the kind of organizational structure that earlier had made full participation in the conference possible and which, in turn, seems to have encouraged instigation of follow-up from a wide spectrum of organizational members.

However, what seems even more important than these internal characteristics in accounting for follow-up responses is the research staff's relationship to the institution throughout the course of the study and the feedback process. Of course, as we pointed out earlier, it was easier to have informal and expansive relationships at schools where authority relationships were somewhat less hierarchical and rigidly defined. But, as we also indicated earlier, our relationships to the schools are not, by any means, totally explainable by this factor. One of the schools where our relationships were most limited was not a rigidly hierarchically defined structure. This means it is worth considerating separately the factor of interaction between the research staff and persons at the institution, particularly our relationships the liaison people, in interpreting what has happened since the feedback conferences.

Let us look at the two institutions where all three types of requests for follow-up have been made. Both of these are schools where the earlier relationships between our staff and the liaison person were unusually good and led to a large number of informal contacts on the campus. At one of these schools there is also a broader connection with the University of Michigan which provides a context for continued relationship to the school. In other words, at this school, the importance of relationship factors is seen not only in our staff's relationship with the liaison person but also in our relationships with other people on the campus and in the broader context of interinstitutional cooperation. At the other school, it is particularly the relationship with the liaison person which has been the critical factor. In fact, this was the school where the president had initially responded to our first letter by suggesting he would let us know if and when any contact with the staff was desired. It is our feeling that there might not have been a conference nor certainly any follow-up after the conference if it had not been for the particular person who had acted as the liaison to the study. He is a social scientist who has numerous responsibilities on that campus and who saw this study as a means of working toward his own objectives for the institution. It was he, as chairman of the self-study committee, who instigated a trip by our staff to meet with the committee and who later suggested the study of faculty and nonacademic staff in which we collaborated. This school is one where there are many external inputs; it is not in any sense a closed or isolated school. Nevertheless, the question of whether any particular input will be utilized, given that people are very busy and the inputs so plentiful, may well depend almost exclusively on the existence of a person who sees the study as relevant to his own objectives.

Finally, we can see the importance of relationship factors in a school where the internal characteristics are such that we would have expected the research to be utilized but where there were no follow-up requests at all during the year following the conference. This is a school where there had been moderate responsiveness to our initial letter, positive response to involving organizational members across the hierarchical structure, but no collaboration in planning the conferences. The lack of collaboration at that stage and the fact that we have not heard from this school since the conference both seem to reflect a deficit in our relationship to the school. This is all the more striking because the school is one where the research might have had an impact. It is a school where the president is exceptionally effective in his leadership within the school. Furthermore, he is a person who, by both social science training and by prior professional roles, should have been quite interested in the research results. Moreover, the study results of this school showed that it had had unusually positive effects on student motivation. These results might well have been utilized by the president in his fund-raising and resource-building role. Yet, we failed at this school by not finding a way to show this very busy but potentially responsive president the relevance of the research for his institution. This could have been done had we focused on the importance of this relationship factor much earlier in the research process.

Thus far we have seen that, to some extent, the nature of the institution's organization structure, and to a larger extent the nature of our staff's relationships to the schools, are associated with which institutions have utilized the research since the conferences were held. There is also the question of how external inputs, other than the research results and the research staff, may have operated in promoting use of the research. It is striking, for instance, that both of the schools which have made all three types of requests rank as the top two schools with respect to their command over grants from the federal government and the two foundations which made the largest contributions to predominantly Negro colleges during the period of 1964-67. Furthermore, the schools with which there has been at least some follow-up contact fall in the middle of the rank order of command over external resources. And, two of the three schools from which there have been no follow-up requests fall at the bottom of the rank order, both being schools that have received much smaller grants than the other six participating institutions. This is not explainable by type of sponsorship since one of these is private, one public. Thus, in general, we see a rather impressive association between amount of external inputs of a financial sort and utilization of the research results in the year following the feedback conferences. There are, however, two deviant cases, one an institution that did request further data analysis and suggested new research collaboration since the conference despite being an institution that has received relatively little outside financial assistance, and one an institution that has made no requests at all despite having been the recepient of large outside grants, indeed the third top school in command over external resources. In both cases, the more important explanatory factor seems to lie in the nature of our staff's relationship to the school. In the former case, where the follow-up has been greater than one might expect given relatively little external input of a financial sort, the relationship with the liaison person and his own interests in using the study to promote certain developments at the institution, stand out in a positive way. In the latter case, where follow-up has been completely lacking despite command over considerable external resources and despite an authority structure that should have encouraged responsiveness to the research project, the relationships between the research staff and the school stand out as the critical negative factor. It is the school we have described throughout this results section as the most important case to illustrate the significance of relationship factors. It is not that the interactions were hostile or lacking in cooperativeness; they simply remained at a very formal and uninvolved level such that the research was completed without any discussion occurring that could have promoted utilization. This is the same school where only four people met to discuss the study results, where essentially there was no feedback conference of any consequence.

IV. Discussion and Implications

The Issue of Credibility and Trust

Research results and the staff of a research organization are, like other outside resources, inputs which may be utilized by an institution for converting its own resources for a desired outcome. Whether this happens, however, depends not only on the nature of the institution's internal resources but also on the nature of the external input itself. In addition, it depends on the interaction between the institution and the agents who mediate the resources from the outside. In the case of a research input, it depends heavily on the interaction with the research staff. Whether the research staff is trusted and the research input is perceived as credible will certainly affect whether it is utilized for institutional development and change.

Even when an educational institution is cooperative and receptive to the research endeavor, it may legitimately question the purpose of the research and the use that may be made of the research results. This is particularly true when the research is not an "in-house project," but, instead, is conducted by an outside agency over which the educational institution has no control apart from non-cooperation. Since this was the situation in this research endeavor, the institutions involved understandably expressed some cautiousness about the feedback project until they had been given the opportunity to read the report intended for public presentation. After all, these institutions had been open to the research, had made provision for administering questionnaires to all their sutdents and had provided test scores and grade records to the outside research organization without any guarantee of what would be done with the results. It is not surprising that they might approach the discussion of results with some questions about the motivations and intent of the organization to which they had been so helpful.

Furthermore, these institutions, all being predominantly Negro colleges in the Deep South, had even more reason to wonder about the motivations of a research organization from a large and affluent northern university. For many years the predominantly Negro colleges had been largely out of the mainstream of higher education in the United States. With the onset of the student sit-in movement and the consequent heightening of the civil rights struggle in the sixties, these institutions had come into focus in a way they had never been for most Americans. For instance, during the course of the study our staff attended a meeting of educators where someone happened to speak about the Nashville, Tennessee, area in terms of its wealth of educational opportunities. This person noted that there were two very fine institutions within Nashville, Vanderbilt University and Peabody Institute, and another, the University of the South, lying just outside the city limits. These three institutions are predominantly white. There was no mention by this rather statusful educator in the higher education scene that Nashville is also the home of two other institutions, both predominantly Negro institutions, Fisk University and Tennessee A&I University. The invisibility of the predominantly Negro colleges is not simply a phenomenon of the past; even today many educators, let alone lay people, either do not know or forget these schools exist unless the topic of conversation specifically centers on the predominantly Negro educational circuit. The reason for this invisibility has both historical and contemporary determinants; the point here is not to analyze the determinants but to understand how people at these previously forgotten institutions reacted when a virtual stream of outsiders began to hit their campuses around 1963. Is it any wonder that there were some questions about the capacity of these outsiders, who previously had had little or no contact with these schools, to understand the way these institutions had functioned in the past, how they defined their present problems, and how they conceive of the directions and goals that predominantly Negro institutions might have at this juncture of history. Of course, it can be argued that outsiders can lend objectivity to a situation by virtue of not sharing an institution's past or present and by not being deeply identified with its future. Moreover, it is possible that an outsider can broaden the perspective of an institution by seeing its problems and its characteristics as instances of a broader class of institutions. With a broader perspective, the structure and functioning of these institutions may appear quite similar to other institutions which are small or have the same type of sponsorship or which have relatively limited financial resources. Still, by having so little sense of the historical context in which these institutions developed and by having so little experience with their contemporary struggle, an outsider can lack the detailed knowledge that produces insightfulness and credibility as a researcher. When the outsider is also from a more affluent or prominent institution, there is added to these other difficulties another potential limitation in developing credibility and trust.

For the outside organization simply to recognize these difficulties is not enough. It is far too easy to translate awareness of potential difficulties into expecting institutional "defensiveness and sensitivity" which the outside organization must be prepared to manage with deftness. Such an orientation puts the burden of responsibility for these relationship problems on the institutions themselves; it makes feelings of cautiousness and suspicion sound unjustified. Instead, our experience is that difficulties in establishing trust stem from interactional problems that cannot be located solely within the institution nor solely within the outside organization. Furthermore, it highlights that much of the responsibility does fall on the outside agency, certainly much more than is implied when one talks about handling "defensiveness and sensitivity" in others. For example, the way in which we initiated the idea of conducting feedback conferences, asking for institutional cooperation before the final report of the study had been published, was presumptious. Moreover, there is no reason to conclude that it is the sensitivity of these institutions that made such a strategy unwise. Should any research group expect such a level of cooperation and trust when the relationship is such that the other party has little or no control over the research product? Willingness on the part of outside agencies to scrutinize their own actions and particularly the importance of interactive factors instead of depending on explanations of institutional defensiveness is mandatory if their contributions, particularly those which do not include financial assistance, are likely to be utilized.

Importance of Interactional Factors

Thus far we have talked at a general level about the importance of trust for the utilization of research results. In addition, there are at least three specified ways in which interactional factors affected the feedback process. First, the relationships between our staff and people in the cooperating institutions were critical in accounting for which institutions responded positively to the proposal for collaborative planning for the feedback conferences. The four institutions where collaborative planning occurred where those where the more informal, expansive relationships had developed; the four where it did not occur were those where our interaction with the official liaison person had been much more formal, primarily limited to contacts necessitated by administering the research. It was also on these latter four campuses that our relationships were more likely to include only those persons who had some official connection to the study. Secondly, these kinds of relationship factors were also important in explaining how participation in the conference was handled at the one school where its organizational structure was not the major determinant of conference composition. It will be recalled that there was one institution where only four administrators met to discuss the study. This limited participation was not explainable, as the more restricted participation in two other schools was, by an authority structure in which the administrative style was to exclude persons at lower levels of the hierarchy in the administrative process. Indeed, this school was one with a rather open structure, where students as well as faculty had a voice in administrative committees. The failure seems to be explained, instead, by lack of interest in the study which, in turn, reflects the quite limited relationships that were developed at this school. Finally, interactional factors were critical in explaining which schools have made use of the research results since the feedback conferences. It is not surprising that the school in which the relationships had been so limited that we essentially failed in the conference itself also did not make use of the research in the following year. Furthermore, there is yet another institution that even better illustrates the importance of relationship factors in accounting for eventual follow-up and utilization. It is a school where the internal structure is such that one might have predicted that the study and dissemination process would have an impact. It is also a school where the study results showed quite a positive institutional effect on its students' motivations. They were results that might well have been picked up, at least by persons concerned with fund raising and resource development. Yet, even this did not happen. There have been no requests for follow-up nor any evidence that this school has used the results in any way since the feedback conference. We feel this is best explained by our failure to develop a relationship in which the study's relevance to the school might have been discussed with the very effective president of this institution. At this particular school the president is a key figure whose involvement in the study's results might well have made a difference between a useful or irrelevant outside input to the campus.

If these relationship factors are so critical, they point to certain implications for social scientists who are concerned about utilization of research. First of all, the importance of relationships with the cooperating institution must be salient to the research organization throughout the course of the research, not simply at the point of discussing results of the study. Secondly, concern with interaction must include issues beyond whether the institution is cooperating with research requests. In a large field study such as this one, it is easy in the early stages of the process to be preoccupied simply with whether and how well the collection of data is proceeding. Yet, the results of our experience show that data collection may go very smoothly without relationships developing that will facilitate utilization of the data at a later time. With sufficiently greater concern all along about other goals in the relationships with the liaison people, we might well have been more successful in the dissemination process on the several campuses where these relationship factors seem to have been important lacks. Of course, researchers are not always skilled or even interested in these interactional factors apart from the strictly instrumental sense of getting the study done. And, this in turn, raises implications for the selection and training of personnel to carry out these various functions, with their somewhat different relationship demands, if research utilization is one of the agency's goals.

Choice of the particular persons within the cooperating institutions with whom these more expansive relationships may be developed is also an issue. We indicated earlier that two factors seem to distinguish the persons with whom the relationships seemed to be more conducive for subsequent research utilization. One is the person's area of academic specialization and the other whether the study was perceived by the person as an opportunity to advance some of his own objectives for the institution. Of course, this latter factor may have been highly influenced by the interaction itself instead of acting primarily as a determinant of the subsequent relationship. How do we see these two factors operating? In the first place, all four of the people with whom the more expansive relationships developed were either social scientists or trained in social research methods. Of course, they may have held other positions in the institution; it is just that their training involved research methods. Still more significant perhaps is the fact that none of them were identified with the two professional disciplines represented by the research staff, sociology and social psychology. Instead, they came out of allied social science fields or educational research. In contrast, three of the four liaison people with whom we had much more formal relationships were trained as physical scientists and one as a sociologist. As a group they were either rather unfamiliar with social science research or, in the case of the sociologist, so versed in the content and methods that the outside research organization may have been particularly resented for intruding in his area of expertise. Although we should be cautious about generalizing from these few cases, there may be something to what areas of expertise are represented in the interactions of outsiders and members of the cooperating institutions. It may be much easier for a person to use an outside research organization when his area of expertise is close but not too close, when he shares the research perspective but does not have the identical professional identity. Secondly, all four of the people with whom the more expansive relationships developed have also subsequently used the research for specific programs or reappraisal of institutional objectives that are in line with their own concerns and change objectives. They are people who could easily see the relevance of the research for the institution because they were committed to innovation and had specific ideas for changes and developments. When research results are supportive of the directions and goals of a committed organizational member, they are all the more likely to be used for actual change and development. Finally, these two factors, academic specialization and perception of the study as a vehicle for promoting one's own change objectives, are undoubtedly related. When the liaison person is knowledgeable about research methods and social science material, he is all the more likely to see the study as potentially relevant for programmatic development within the institution.

If these two factors, the liaison person's area of academic specialization and his desire to use the study as a support for his own ideas for innovation, are as important as we think, it highlights how crucial it is to talk about openness of the institution at a very specific level. An institution is probably not generally open or responsive to outside inputs; rather how open it is may depend on the kind of input it is and the input's point of entry within the institution. In this dissemination project it may have depended greatly on the particular people through whom the input was introduced and mediated to the institution as a whole. These more specific indicators of openness, whether there are "open" people in key roles who see the input as a spur to innovation, may be much more helpful than some general system-wide measures of openness if we are to predict whether or not an institution will use its internal resources along with the outside input for institutional change. This would suggest analysis that is much more detailed and specifically much more at a subinstitutional level than is sometimes implied by general systems approaches.

Importance of the Conference Discussion Groups Themselves

Another experience that bears comment has to do with size and composition of the discussion groups at the conferences. The results indicate that the reactions of participants to the conferences are affected very much by the nature of the conferences themselves. The most positive reactions, particularly about the validity of the results, perceived usefulness of the results, and desires for post-conference follow-up, were expressed by participants in conferences that depended on discussion in small functional groups, groups that were composed of people sharing a common interest at the school. Examples of such groups were faculty of various departments, staff of student personnel, student groups of various types, deans' councils, etc. The least positive reactions came from participants in conferences that depended solely on a larger meeting attended by people with diverse interests. Such a group presents a number of problems in disseminating research results. First, the very fact that the participants represent different departments or divisions and other groups on the campus means, by necessity, that the material presented must be quite general in nature. This is a problem because the general nature of the data seems to result in greater generalization than is wise in a first presentation. Moreover, the size of the group accentuates the problem by making it more difficult to discuss what may be controversial results on the campus. In contrast, the small functional groups seem to have solved many of these problems. Material could be much more specific in that it focused on the common interests of the groups assembled. It was even possible to discuss tables rather than making broad generalizations from the data which are necessitated by a speech to a larger audience. Discussing the tables in turn involved the participants in interpreting the meaning of the data. Furthermore, when data were presented that might be controversial or reacted to emotionally, it was possible in the small groups to talk through the controversy without losing the interest of other people. Finally, these small functional groups promoted much more specific discussion about the implications of the data for programs and developments on the campus. Because the people assembled had a common interest and the data were pointed to that interest, the action-relevance of the research was much more apparent. Thus, our own observations about the effectiveness of the two different approaches to conference composition support the differences in the participants' evaluations as given by analyzing their responses to the Reaction Forms filled out at the conferences. This is one of the ways in which this project's implications for future dissemination projects would seem to be very clear. Full discussion of the study results is much more likely to occur when the conference is organized abound small, functional groups of people with common interests.

Importance of Internal Characteristics of the Institution

Two of the characteristics of the institution which we thought might condition institutional responsiveness to the feedback project turn out to be unimportant. There are no ways, for instance, in which responsiveness seems systematically linked to whether the institution is publicly or privately supported. Similarly, there are no differences as a function of the academic status of the institutions.

Where we do find some differences is in comparing responsiveness to the conferences and subsequent follow-up in schools with somewhat different organizational structures. Two of the schools where conferences were held have been described in this report as having relatively "vertical structures," institutions in which boundaries between hierarchical levels are fairly rigid. Typically, in these schools the faculties have little authority, little involvement in decision making and little access to top administrative decision-making bodies. Moreover, the students in these schools have practically no experience participating on committees with administrators or faculty. These observations of ours about the schools are supported both by data from the earlier student questionnaires and from a question asked in the Reaction Forms filled out by administrators at the time of the conferences. The student data show that these schools, more than others, fit what we have called an Isolation Model of administrative-student relationships. This model is characterized by a split among the student body, a large proportion feeling that the administration alone should decide student regulations but also a large proportion feeling that the students alone are the appropriate decision makers. What is singularly lacking in the schools fitting this model is any widespread endorsement of the idea that administrators and students should work together. Student opinions regarding these matters are also supported by the administrators who agreed, in the Reaction Forms to the conferences, that students rarely, if ever, serve on policy discussion committees with faculty or administration. The other six schools where conferences were held have much less hierarchicalized authority structures. Both the faculties and the students in these other schools report having more involvement in policy discussion and decision making.

As might be expected, these differences in organizational structure were important in the ways in which the institutions responded to the feedback project. Although the president's initial responsiveness to our letter suggesting the conferences was not conditioned by this factor, their subsequent responses to the way participation in the conference would be handled were affected. The two schools with the rather vertical authority structures were not willing to involve a wide cross-section of organizational members in the conference proceedings. When the traditional locus of decision making is the administrative apparatus in isolation from participation of other institutional members, it is not surprising that schools would also respond to the notion of wide involvement in the conferences in a somewhat negative manner. Reaction to the conference composition seems to reflect traditional modes of relationships across organizational levels.

The question of how participation in the conference was handled, in turn, had implications for the nature of the conference groups and, therefore, had implications for the quality of the discussion. It was these two schools where the single session involving administrative people representing different interests on campus was the mode of procedure. Yet, we have learned that the conferences were evaluated more positively when small, functional groupings composed of people with common interests were used for discussing the research results. But, it was only possible to have these small, functional groupings where participation was broad and very full and it was only possible to have the broad participation at those institutions where the typical communication patterns prior to the feedback conference included faculty and students.

This issue of organizational structure is also important in accounting for follow-up subsequent to the feedback conferences. This can be seen both from the fact that we have never heard again from the two vertically organized institutions that were not included in the feedback conferences and from the fact that there have been no follow-up requests from one of the two hierarchically organized institutions where a conference was held. Furthermore, although there has been one type of follow-up request from the one remaining institution which fits this pattern, this happened only after this institution had undergone a major change in its structure. The request came from a group of faculty who had supported student demands for institutional change and who, after the president had resigned, formed a committee for suggesting new administrative arrangements. Then the research results were used, among other resources, to stimulate and buttress a new approach to organizational relationships.

The implications from these results are clearly that certain organizational structures limit the potential usefulness of research, at least when it is conducted by an outside agency. This does not mean that attempts to disseminate results in such schools should not be made; it only highlights the likelihood that the effects will be much more limited than in structures where broad participation and involvement in the dissemination process is possible.

Importance of External Resources

In examining the effects of this research project and the feedback process, we should keep in mind what kind of resource we were offering. At a time when financial resources from government and foundations were beginning to be directed to a group of colleges previously much excluded from many sources of funds, we can hardly expect an input which did not involve financial assistance to have a major impact. At the time of the dissemination conferences, attention to fund raising was very keen since the increasingly available funds promoted institutional competition for those funds. No criticism of institutional priorities is implied in these remarks. Indeed, any other reaction to the loosening up of funds would have been quite unrealistic since the new sources were not unlimited and did demand a competitive orientation. Devotion of major energies to tapping those resources, even if that meant somewhat less concern with other types of external resources, was necessary if a given institution was not to be left out in the cold. It is just that we should expect this need for economic resources and the stimulation of competition from increasingly available funds would together operate to minimize the impact of other types of resources, perhaps particularly the impact of research results. At least research results might have less impact in institutions where command over economic resources was rather low; they might have their greatest impact where successful competition for funds provided the wherewithal to develop new programs or where their value in obtaining further economic resources was evident.

This is generally what we find. Responsiveness of the institution, particularly to collaborative planning for the feedback conferences, and subsequent utilization of the research results were greater in institutions that were also obtaining the largest amounts of financial resources from two major sources of funds, the federal government and two foundations which were the predominant supporters of Negro colleges during the years of 1963-1967. The two schools which have made the most requests for follow-up since the feedback conferences also rank as the top two schools with respect to their command over grants from these two sources. Furthermore, the schools at which there has been at least some follow-up contact fall in the middle of the rank order of command over external resources. And two of the three schools in which there have been no follow-up requests fall at the bottom of the rank order, both being schools that have received much smaller grants than the other six participating institutions.

This is not to say that other kinds of inputs, apart from research results and financial assistance, are unimportant. Indeed, the schools obtaining the largest share of economic inputs may also have been recipients of many other types of resources as well. This was a period of time when the accrediting association was beginning its ten-year self-study programs for these institutions. It was also a time when interinstitutional cooperation programs began to be developed. It is altogether possible that certain institutions were able to use the self-study experience and cooperative arrangements to further their capability of obtaining grants. Or it may be possible that the receipt of financial assistance may have encouraged greater utilization of these other inputs. The direction of the causation is unclear. Certainly the unique effects of financial inputs are unclear. What does seem to be clear is that utilization of research results has the greatest likelihood of occurring in situations where numerous inputs from external sources exist.

Models of Institutional Change

We have seen that all of these factors, certain internal characteristics of the institution, the interaction of the research staff with representatives of the institution, the nature of the conferences themselves, and certain external resources made available to the institution, are important in at least some ways in accounting for responsiveness to the dissemination project and subsequent utilization of the research results. Furthermore, we have learned that a particular factor may be important for one measure of responsiveness but not another. From this, it is possible to conclude that no one factor is all-important, either in the sense of standing out among all the possible explanatory variables or in the sense of being important for every aspect of responsiveness and effect. From these results, is it possible to suggest a model that might be used to explain under what conditions the dissemination of research results is most likely to make an impact?

James Coleman in a forthcoming publication (1968) suggests a model for analyzing social change that seems highly applicable to the experience of this dissemination project. That model makes explicit assumptions about interactive effects of a variety of input factors, which in some multiplicative fashion are converted into a joint resource that promotes certain outcomes. As an example, Coleman talks about models for explaining economic and social growth of "less developed" countries. He argues that certain models of social change have relied too heavily on the importance of single factors, for instance, the importance of external resources in the form of capital investment. And certain models, though incorporating both external resources and certain internal resources of the developing nation, have assumed that these multiple factors combine in an additive manner. Thus, a country which has very strong internal resources such as strong support for change and innovation but only very minimal investment of outside capital should show as much social change as another country with approximately equal amounts of both internal and external resources. At least this should be true if the sum of the two factors in the two countries turns out approximately the same. In contrast to this additive model, Coleman argues there may be no change at all in the first country if external resources are so small as to be below a minimum necessary for converting the internal resources into change forces. In other words, in this interactive model the importance of certain internal characteristics depends on the existence of some level of external resources. The corollary would be that change is not likely to occur, no matter how much capital investment is made, if the external resources are expended in a situation where there are very few, if any, internal resources that can be converted for economic and social growth. Although we are used to assuming that a little bit of any desirable factor is bound to help at least a little bit, this model would argue that the utility of any given factor may depend on what other factors are also present. The actual resource that produces change is the product of the separate inputs.

In what way would this model seem to fit our experience? The constant variable in all eight schools is the research input. Its effect varies, however, as a function of its interaction with other factors. The other factors we have looked at include nature of the organizational structure, interaction of the research staff with organizational members, and magnitude of external resources, particularly economic resources. It is true that certain of the schools show a pattern of response that could come from an additive model. The two schools where there was the greatest amount of institutional responsiveness and where all three types of follow-up requests have been made are both schools where all the factors we have looked at existed in a positive way. They are schools with fairly open authority structures in which faculty and students both have at least some voice in policy discussion and determination; they are both schools where our relationships on the campus were particularly widespread beyond the official liaison person and were expansive and informal in quality; the liaison person at each of these schools was trained in social science methods, was particularly interested in and knowledgeable about the research process, and saw the study's relevance for certain innovation goals he held for the institution; finally, these two schools are at the top of a rank order of institutions with respect to command over external resources in the years 1963-67. In other words, all the positive factors operated at high levels in these two institutions relative to others included in the project. Conversely, the school with the lowest institutional responsiveness to the idea of the conferences and which has made no requests for follow-up since the conference is also a school in which most of these factors, considered positive resources for change, were fairly lacking. It is a school with what we have called a rather vertical authority structure; our relationships with the liaison person on this campus were formal and restricted to the official job of administering the research itself; furthermore, this liaison person was a physical scientist who was not particularly attuned to this kind of research process; and finally, this is the school that was at the bottom of the rank order of command over external resources.

Despite these cases that could be explained by an additive model, there are other institutions which very much seem to fit the model suggested by Coleman. For instance, we have learned that the nature of the organizational structure is an important limiter of research effects on the institution. Nevertheless, the existence of an open and democratic structure is not sufficient. An institution must also have some level of external inputs and relationships with change agents or research staff that facilitate utilization of the inputs. As an example, there is the school where, despite an authority structure that does include faculty and student participation and despite sizable economic inputs, institutional responsiveness to the dissemination project was very low and subsequent utilization of the results has been nonexistent. This is a school where the president responded to our initial letter only after a two-month period and a follow-up phone call was made; it is also a school where there was no collaborative planning for the feedback conferences and the one school where it can hardly be said that a conference was held at all since only four top-level administrators met to discuss the study results; finally, it is a school from which there have been no follow-up requests since that rather limited meeting. The one factor which seems to be missing, that apparently is necessary to convert the other positive factors operating in this institution, is a relationship between the research staff and the liaison person or other organizational members that would be conducive to utilization. Despite the apparent potentiality for developing relationships on this campus, our relationships were quite formal and limited to a very official definition of research tasks. It is certainly our greatest failure among the eight schools. It clearly shows how the existence of several positive factors is not enough unless positive relationship input factors are also present.

Still another example that fits this kind of interactive model is a school where the organizational structure includes a great deal of faculty and student involvement and where our relationships were at least moderately expansive and informal. What seems to be missing is any sizable amount of economic inputs from outside sources. There has been some follow-up from this school and certainly more responsiveness to the dissemination project that was true the first example given. Nevertheless, the impact of the research is more limited than we might have expected if the importance of the institutional structure and relationship of the research staff to the campus did not depend on external resources as well.

With only eight schools and many factors varying, in addition to those we measured and analyzed, it would be dangerous to push too much for the fit of this interactive model to the results of our experience. In our eyes, the importance of the model in accounting for the impact of external inputs in "developing institutions" does not lie in whether it fits our data but in the fact it presents a more complicated picture than is often considered. With this kind of model, it is not possible to explain impact or effect as the simple function of internal characteristics of the institution. Furthermore, this is not simply because a single-factor theory is insufficient; it is also because this model highlights the notion of a joint resource, the components of which depend on each other to produce an effect. Whether this model fits all cases of institutional development and change, it does have the exciting value of sharpening the complexity of our analyses of change.

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APPENDIX

Conference Reaction Form

UNIVERSITY OF MICHIGAN
INSTITUTE FOR SOCIAL RESEARCH
ANN ARBOR, MICHIGAN

The Michigan research group is concerned about problems of communicating and translating research results. We know very little about how to assure that the results will be meaningful and helpful to the schools that have participated in the study. One way in which you can guide us is to give your honest reactions to the meeting today. Even more important are your ideas about how future meetings might be improved.

We will appreciate your answers to these questions very much. Learning how you evaluate what has been done to date can only help improve the research process and communication of research results in the future.

PLEASE DO NOT WRITE YOUR NAME ON THIS FORM. JUST GIVE THE TITLE OF YOUR POSITION IN THE INSTITUTION BELOW.

____
(Title of Position: Student; Teacher - with department and rank specified; Dean; Counseling personnel, etc.)

____
(Name of Institution)

Number of years you have been at this institution? ____

THE FOLLOWING QUESTIONS SHOULD ONLY TAKE ABOUT FIFTEEN OR TWENTY MINUTES TO ANSWER. YOU CAN USE THE ATTACHED RETURN ENVELOPE TO MAIL THIS FORM DIRECTLY TO THE INSTITUTE FOR SOCIAL RESEARCH WHEN YOU HAVE COMPLETED IT. WE WILL BE VERY GRATEFUL FOR YOUR ASSISTANCE.

Specific Reactions to the Meeting

Below is a series of statements about the results and the meeting to report these results. You may agree with some and strongly disagree with others. Would you check how much you agree with each of the statements?

	Strongly disagree	Disagree	Agree	Strongly agree
The results were not very clearly presented.	☐	☐	☐	☐
I had some trouble understanding some of the results.	☐	☐	☐	☐
I was surprised by some of the results.	☐	☐	☐	☐
Every school (division, department) is different from every other one. You can't generalize.	☐	☐	☐	☐
The comparisons of different departments within our school are more helpful than the comparisons of our school with the others that participated in the study.	☐	☐	☐	☐
The comparisons of the ten different schools that took part in the study were more helpful than the comparisons of the departments within our school.	☐	☐	☐	☐
I would like to have more meetings like today.	☐	☐	☐	☐
It would be valuable for faculty and students to discuss these results together.	☐	☐	☐	☐
I would find this kind of meeting more valuable if more stress were put on the implications of the results.	☐	☐	☐	☐
I would not want the research team to suggest what ought to be done about the results; that is our job.	☐	☐	☐	☐
It was an interesting meeting but I don't think I acquired any useful knowledge today.	☐	☐	☐	☐
I wonder about the validity of some of the results.	☐	☐	☐	☐
It would be difficult to apply these results (to do anything about the issues raised today).	☐	☐	☐	☐
I would like to explore the results in more detail.	☐	☐	☐	☐
Bringing about changes in curriculum, academic or other policies is a very difficult thing to do in all institutions.	☐	☐	☐	☐
Change is generally difficult to achieve but it may be a little more difficult in our school than in some other institutions.	☐	☐	☐	☐

General Comments about the Results

1. Do you see anything in the results that you think would be helpful to you in your teaching (or your work as an administrator, your work as a counselor, your role in student affairs, etc.)

    ☐ A great deal that would be helpful

    ☐ Some things that would be helpful

    ☐ Perhaps a little

    ☐ No, not really

2. How could the research have been carried out so it would have been more useful to your division? (or your school?) Are there some areas you feel should have been explored but were not?

3. Did the results we discussed suggest any action implications to you? Did they indicate any changes or new approaches that might be tried in your division (or your school)?

    ☐ Yes

    ☐ No

    (IF YES) What kinds of things do you have in mind?

4. Is there anything further the research group might do that would be helpful regarding your school's participation in this study?

A Few Questions about Your Role at the School (FOR NON-STUDENTS ONLY)

1. What is your major function here (teaching, administration, research, counseling, etc.)? ______________________________

2. How much time do you spend teaching? __________ (% of time)

3. How much is spent in administrative work? __________ (% of time)

4. How much is spent in research activities? __________ (% of time)

5. What other functions or duties are involved in your work load? ______________________________

6. Do you have any released time for counseling students--either academic counseling or occupational counseling?

☐ Yes (IF YES) What proportion of your time is involved? ______________
Do you have this function on a regular basis or only during certain periods such as registration? (PLEASE EXPLAIN)

☐ No

(IF NO) Have you been able to do any advising or counseling on your own time?

☐ Yes (IF YES) How much time would you say is involved? ______________

☐ No

7. Do you serve as an advisor to any student organizations on the campus?

☐ Yes ☐ No

8. To what extent and in what ways would you say that students are involved in determination of policies and regulations at the school? To the best of your knowledge, do they serve on any committees with faculty or administration?

9. Have you been able to maintain any personal contact with graduates you have taught or known as undergraduates?

☐ Yes, I have contact with many

☐ Yes, I have contact with a few

☐ No, not really

OE 6000 (REV. 9-66)

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION

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TITLE

Evaluation of a Series of Conferences to Disseminate Research Results on Vocational Choice

PERSONAL AUTHOR(S)

Patricia Gurin

INSTITUTION (SOURCE)

Institute for Social Research, University of Michigan, Ann Arbor

SOURCE CODE

REPORT/SERIES NO.

OTHER SOURCE

SOURCE CODE

OTHER REPORT NO.

OTHER SOURCE

SOURCE CODE

OTHER REPORT NO.

PUB'L. DATE 5 – 30 – 68

CONTRACT GRANT NUMBER OE 6-85-085

PAGINATION, ETC.

57 pages

RETRIEVAL TERMS

Feedback, dissemination, internal institutional characteristics, exogenous factors, research utilization, institutional responsiveness, external inputs, internal and external system, command over external resources, interactional or relationship factors

IDENTIFIERS

ABSTRACT

This report discusses a dissemination project, the objectives of which were: (1) to conduct a set of conferences at eight predominantly Negro colleges to report research results from a study in which they had previously participated; (2) to evaluate the effectiveness of these conferences; (3) to relate effectiveness of the feedback to (a) internal institutional characteristics, (b) the research team's interactions with the institutions, and (c) resources available to the institutions.

The conferences were clearly more effective at certain schools than at others. At the point of proposing the conferences, three schools stood out as unusually responsive and three others as much less interested. These initial responses then provided the basic context for later actions. The conferences held at the three most responsive schools were also evaluated by the participants in much more positive terms. Furthermore, the requests for follow-up discussions of the results and for continued research collaboration since the conferences have come largely from the schools which were initially the most responsive.

Since the major factors which account for these differences in effectiveness are the more exogenous ones, particularly the nature of the research organization's prior relationships to the schools and the school's command over external resources, the results raise important implications for researchers if they hope to affect the usefulness and relevance of research for educational institutions.